

# THE MEDICAL NEWS.

A WEEKLY JOURNAL OF MEDICAL SCIENCE.

VOL. LVI.

SATURDAY, MAY 17, 1890.

NO. 20.

## ORIGINAL LECTURES.

### TWO SUCCESSIVE CASES OF LAPAROTOMY, FOR OVARIAN CYST AND FOR OVARIAN INSANITY.

*A Clinical Lecture  
delivered at the Hospital of the University of Pennsylvania.*

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#### DOUBLE OVARIOTOMY.

GENTLEMEN: You will kindly excuse me from talking as much as usual this morning, because I have two laparotomies to perform within my hour, and I must get through with them so as not to intrude upon my colleague's time.

To begin then: The patient, now etherized before you on the table, is twenty-seven years old. She menstruates regularly, is married, but has no children. Last year she discovered that she had a tumor. Upon examination I found a cystic growth. By the sound I learned that it had no close relation with the womb, and that it began on the right side. Hence, it ought to be a cyst of the right ovary. Before beginning the operation I shall have the pubic hair removed, because it might become the nidus for septic matter. Formerly I had the pubes shaved on the day before the operation, but the effect upon my patients was too much like that of the "toilette of the guillotine," and I had to give it up until they were anesthetized. This tumor was discovered not quite one year ago, and by operating early I shall be less likely to find adhesions than if I waited until it had grown larger. So far this session you have seen little but laparotomies in this amphitheatre; but, bear with me for a while, and you will be repaid by other operations of a more practical character, such as a physician ordinarily meets with.

The first thing I do in this case is to pinch up the abdominal wall in order to estimate its thickness. Next, I make a bold incision straight down through the fascia to the præ-peritoneal fat. This is cut and teased apart until the peritoneum is exposed. All bleeding points are now secured by catch-forceps. The peritoneum is picked up and nicked open, and a finger introduced. Thus far it is easier work than that of a simple oöphorectomy, because here I have a tumor between my knife and the bowels, and I am, therefore, not afraid of wounding the latter. You can now see the tumor exposed between the lips of the wound. It is of a pearly hue, which is pathognomonic of ovarian cysts. The next thing to be done is to empty it. This I do by puncturing it at the upper end of the wound, so that the trocar may have room to travel down with the collapsing cyst, and not slip out as it otherwise would. The fluid is chocolate-colored, and it sparkles with minute crystals of cholesterine. There are several daughter-cysts inside of

the mother-cyst, and these I puncture separately, each one yielding a differently colored fluid. In the last one it is quite clear and limpid, much like that of a parovarian cyst. There are but few adhesions, and these I break off, or rather wipe off, from the abdominal wall by means of a sponge. A few bleeding points I catch with the hæmostatic forceps. The pedicle is very broad, and so short that the lower end of the mother-cyst dips down into uterine tissue. This portion I carefully peel out, and then catch the short pedicle by two large forceps. I shall tie this broad pedicle by the Staffordshire knot, but I do not trust to a single transfixion, which would not securely strangle so much tissue. I, therefore, transfix the stalk three times with the aneurism-needle. The transfixion must be done an odd number of times, once, thrice, or five times, else the Staffordshire knot cannot be made. The knot I am now tying is half cobbler's and half Staffordshire. After tying this knot I take the additional precaution of threading two needles with the free ends of the ligature, and of passing them through each extreme edge of the pedicle so as to prevent slipping, and then tying one more loop very tightly. I now examine the other ovary and find that it too is diseased—so badly diseased that in a few months it would also have become a large cyst, demanding removal. Its pedicle I transfix but once, because it is slender and long. This ovary I shall put on a plate and hand round to you to examine. Observe how hypertrophied it is, and note also the cyst at one end of it as large as a walnut. The ovarian stroma shows cystic and interstitial degeneration to a marked degree. My son has placed several sponges inside of the abdomen to protect the viscera from the atmosphere, and to guard them from any blood that may drop in from the wound. The sutures are now inserted, and I take the sponges out of the cavity through the incision, which grows shorter and shorter as the elastic abdominal wall, distended by the tumor, contracts. These sponges are so clean that I know that no oozing is going on. I now count them, as well as my instruments, for sponges and forceps have repeatedly been left behind by not observing this rule. Finding the number is correct I proceed to tie the sutures. The dressing consists of: 1. Powdered iodoform, which is sprinkled over the incision, especially about the navel. 2. Iodoform gauze. 3. Bichloride cotton. 4. Baked cotton, secured by adhesive straps and a stout flannel bandage around the whole abdomen, which bandage is in this case only provisional.

#### OOPHORECTOMY FOR OVARIAN INSANITY.

The next patient is thirty-five years old. She has been married nineteen years, and is sterile. Three years ago she began to have pains in both groins, especially on the right side. This condition went on from bad to worse until she was too crippled to do housework. Early in this year she came to me to have her ovaries removed. I did not then consider the case bad enough for a radi-

cal operation. So she was kept in the hospital for some time, had a retroverted womb replaced by a pessary, and she improved under general treatment. After leaving us she became worse again, and at my recommendation went to the Orthopaedic Hospital, where she staid seven weeks under the treatment of massage and electricity. While there she gained flesh, and when discharged was feeling very much better. This improvement, however, lasted but a short time. She rapidly grew worse, and two weeks ago she wrote me a most disheartening letter, and soon afterward came here for further treatment. She is fat, and I have never been able to outline her ovaries to my satisfaction. Yet, after repeated unfruitful examinations, I have come to the conclusion, from her history, that she is suffering from much more than a mere neurosis. For after a close cross-questioning I find, from the symptoms detailed, that she must have had a peritonitis. If so, the ovaries are probably fixed by adhesions, and so flattened and so high up on the pelvic wall that I have not been able to reach them. Sometimes the ovaries are so thinned out, spread out, and, as it were, plastered on the pelvic wall, that they elude the examining finger.

With these facts before me, I have yielded to her solicitations, and I shall now proceed to at least an exploratory incision. Since no tumor lies between the bowels and the abdominal walls I cannot cut down so boldly to the peritoneum as I did in the former case. When I come to the *præ-peritoneal* fat I tease it open, and pinch up the underlying serous membrane with two catch-forceps. This is raised up away from the bowels and nicked open with the knife. Bleeding vessels are now caught by forceps, and I insert two fingers into the abdominal cavity.

Finding the womb, I search for the right ovary by running my fingers along the fold of the broad ligament. It is found with some difficulty, flattened against the pelvic wall, high up, and adherent to it. These adhesions are with difficulty severed, but now the ovary and tube are released, tied, and cut off. The pavilion of the tube has disappeared, and it and the ovary present one coherent mass. The left ovary is not so closely adherent to the pelvic wall, but several fiddle-string bands of adhesions need to be broken before it can be removed. The tube is here free, but I wish you to notice how completely absent through destructive inflammation the fimbriated extremity is, and how dense and hard the tube itself is from interstitial salpingitis. Note also the long bands of adhesions which hang from the ovary, and the flocculent fringe of adhesions which floats in the water in which it is placed. It looks almost like the shaggy coat of the chorion, and it represents the points of close attachment to the pelvic wall.

Why did she suffer so much from groin pains? Because the adhesions caused a blood stagnation in the ovaries, and because these organs were dragged upon at every movement of the womb. Again the tubes are blocked at either end and their natural mucous discharges, or the unnatural discharges from the salpingitis present, could not readily escape. Hence, they were subjected to a painful distention.

This woman has evidently had pelvic peritonitis, starting as an endometritis and travelling onward as a salpingitis, as an ovaritis, and, finally, as a peri-uterine inflam-

mation embracing the pelvic peritoneum. The cause of this peritonitis I have not been able to discover, for she was unable to throw any light on it, but I think it is specific.

Besides the constant ovarian pain from which she suffered, there exists another strong reason in favor of this radical operation: she has lately exhibited symptoms of mental aberration at the time of her monthly periods. This alone would have prompted me to the removal of her ovaries, for, of all diseases, insanity is the worst, and is to be averted by all possible means. Insanity, when limited to the time of the monthly periods, shows an ovarian origin, and the removal of the ovaries will then very generally cure the mental disease. This has been my uniform experience. But, on the other hand, if the insanity is constant though exacerbated at the monthly periods, the removal of the ovaries does very little good. It may mitigate the monthly outbursts, but it will not restore the reason. These facts have led me to the conclusion that oöphorectomy for ovarian insanity must be performed early—that is to say, while the insane impulse is periodic and not a constant factor. Another important fact that I have learned by experience is, that the removal of the ovaries cannot be depended upon for the immediate cure of nymphomania or of other erotic forms of insanity. In one of my cases excessive masturbation was not only kept up after the operation, but it was actually enhanced by it for at least a year, when the habit was finally overcome. In another case the erotic impulses lasted for over a year; but they ultimately ceased with the complete loss of the sexual feelings. I could tell you more of my experience in this interesting subject, but, as my hour is up, I shall wheel my patient into an adjoining room and there complete the dressing of the wound.

## ORIGINAL ARTICLES.

### A REPORT OF TWENTY-ONE CASES OF SUPRAPUBIC CYSTOTOMY, WITH REMARKS.<sup>1</sup>

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DURING the last two and a half years I have performed, for different purposes, suprapubic cystotomy in the male twenty times, and in the female once. The patients varied in age from six to seventy-six years. One of the cases died: in this instance a pyelo-nephritis, from long-continued obstruction to the flow of urine, was overlooked, or rather was suspected, but in the great urgency of other symptoms was disregarded. He died eight days after operation, of disease of both kidneys. This patient had been a hard drinker for many years, but for two years before his death had entirely abstained from liquor.

Another case, a child aged six years had suffered for many months from frequent and painful micturition. No cause could be found for the almost con-

<sup>1</sup> Read before the meeting of the American Surgical Association, Washington, May 14, 1890.

stant and frightful pain which the child suffered. He had no cystitis, no stricture or phimosis; his urine was normal; the general health good. His father, an excellent physician, considered the disease purely neurotic. While on a visit to the city in which the child lived, his father asked me to open the bladder above the pubes to secure drainage in that way. As everything else seemed to have been tried, I consented, and operated. For three days the pain was relieved. At the end of this period the child was seized with high fever and convulsions, and the next day scarlet fever made its appearance, and ran the usual course. The tube was removed from the opening, the lips of the wound became swollen, drainage ceased, and the wound was allowed to close. The boy still suffers as he did before the operation.

Five of the operations were done for stone in the bladder. This reduces the number of cases to which I wish very briefly to direct attention, to thirteen males and one female. In five of the thirteen cases chronic cystitis existed. This disease had resisted in all of the cases for months, and in most of them for years, every form of general and local treatment. One of the first cases in which I attempted suprapubic drainage in chronic cystitis, was that of a man, who, having exhausted all remedial means without help, was operated upon by a distinguished surgeon of Philadelphia. The bladder was opened through the perineum, and a large drainage-tube inserted and kept in for three months. He got no relief from this treatment. Some months later he fell into my hands, still suffering fearfully with his bladder, and along with this a constantly leaking perineal fistula, the result of the last operation. I opened his bladder above the pubes, found a small tumor, which was believed to be a papilloma, in the upper, and back part of the organ. The growth was removed; partly with the curette, but chiefly with my finger-nail. This man has improved, but has not recovered. He keeps the suprapubic fistula open, and through it washes his bladder and passes his urine. The improvement is slow, but continuous, and his life is now comparatively comfortable. Another case was that of a man aged about thirty-five years. He had stricture of the urethra, and six or eight fistulous openings in his perineum, and scrotum. His perineum was a mass of inflammatory indurations, his urine was alkaline and stinking, with mucus, pus, and some blood. After opening the bladder above the pubes, I had very little trouble in passing a sound, first into the bladder through the wound, and then into the urethra, and out at the end of the penis, breaking up the stricture in this way. After drainage for six weeks through the suprapubic wound, it was allowed to close; at the end of two months all the fistulous

openings were closed, and the greater part of the indurations of scrotum and perineum had disappeared. A third case is that of a young man with cystitis of four years' standing, following, it was believed, an attack of gonorrhœa. Drainage through a suprapubic opening was kept up for two months with complete recovery.

A fourth case was one of cystitis of two years' duration, which had not yielded to the treatment of five or six surgeons, myself among the number. In seven weeks the man was well, and the suprapubic wound was allowed to close.

A fifth case was that of a physician who had been treated for eight years by different surgeons for chronic cystitis. Six years ago he was attended by me for several months without receiving any permanent benefit. He came to me again, February 10th, suffering terribly and taking two or three grains of morphine every day. I made a suprapubic opening to drain the bladder, and for eight weeks did not permit him to pass the urine through the natural passage. The pain has ceased, the morphine has been abandoned, the urine is nearly natural, and the man is now walking about. He still keeps the fistula open, being afraid of a return of his old symptoms, and cannot yet be regarded as well.

The remaining eight cases of suprapubic cystotomy were done to relieve obstruction from enlarged prostate. None of these cases could be relieved by the simple use of the catheter and irrigation of the bladder. All of them were great sufferers; most of them had reached the period when the introduction of the catheter was very difficult, and would soon be impossible. In several cases the inflammation had extended to the ureters and pelves of the kidneys. In both sexes and at all ages mechanical obstruction to the passage of urine ends in cystitis, ureteritis, pyelitis, and, lastly, pyelo-nephrosis. Two of these cases had, along with the enlarged prostate, stone in the bladder—the existence of which I did not suspect, although I had sounded both for stone. These calculi were found after opening the bladder, in a *cul-de-sac* behind the prostate—in a position in which it would have been impossible to discover them by sounding through the urethra. In two of the cases I found stones before operating. All of these cases are now living and passing urine through the artificial passages.

The first time that I operated above the pubes for stone, I was struck by the fact that the bladder contracted and drove out through the wound every drop of fluid that the organ contained. Afterward it contracted upon my finger and slightly resisted attempts at digital exploration of its cavity. This fact renders the drainage-tube after suprapubic cystotomy unnecessary, except for the first three or four hours to permit the fresh wound to glaze, or, afterward, for



the sake of cleanliness. In none of my cases have I ever had any urinary infiltration. I permit the patient to lie on his back or side, and to change his position whenever he desires to do so. In order to keep the patient clean I generally use a large gum catheter, one end of which is introduced into the bladder through the wound, and the other end lies in a basin placed by his side. The bladder forces the urine through this tube without difficulty, even if it is raised some distance above the level of the surface of the belly. As the wound grows smaller, say to the size of a No. 8 or 10 catheter, and the patient attempts to empty his bladder through this suprapubic fistula, or artificial urethra, a stream is sent out three or four feet from the body, the last part of it coming in jets, as from the natural urethra. If we regard the bladder as a simple bag or receptacle for the urine, it is difficult to comprehend this; but if we look upon it as a distinct organ, with a physiology of its own, and study the mechanism of urination, we can understand it. In cases of complete obstruction from prostatic enlargement, I have kept this suprapubic artificial urethra open for months, in one case for two years. After the fistula is reduced to the size of the natural urethra there is no leaking or dribbling of water, unless the bladder gets too full, and the man retains and expels it at will. The recti muscles keep the walls of the new urethra closed when not in use, and aid in preventing leakage. Indeed, so valuable is the aid of these muscles for the purpose mentioned, that in the next case that I have where an artificial anus is necessary, I will make it, if possible, low down in the middle line, between the recti muscles. This will give an imperfect substitute for a sphincter, but will be better, I am sure, than a simple patulous opening that is constantly discharging.

From my observation of drainage in the cases of suprapubic cystotomy in the male, I find it more complete than in drainage after sections through the perineum. In theory, it may not seem so, but in practice I have found it to be the case.

The other advantages of suprapubic cystotomy for drainage are apparent. The operation is simpler and far less dangerous to life than any cut into the bladder through the perineum. You go through parts less richly endowed with nerves, bloodvessels, etc.; if a fistula is left, and it is above the pubes, it is not constantly leaking or as difficult to manage as a perineal urinary fistula, and there is no danger in suprapubic cystotomy of urinary incontinence, which is often seen after perineal sections, and no danger of impotence, as I have once seen after the latter operation. In drainage through the perineum the man remains on his back in bed, and a tube is kept constantly in the bladder. In the suprapubic method the man can often sit up in a week, or

sooner, perhaps, and do without the tube for several hours at a time.

The last case is that in which I performed suprapubic cystotomy in a female. The case was kindly sent to me by Dr. Tucker, of Henderson, N. C. The lady had lost the whole of the urethra and neck of the bladder by sloughing following delayed and difficult childbirth. There was absolutely no trace of the urethra, or sphincter vesicæ left. I determined in this case to make an artificial urethra above the pubes, and to close up the opening from the bladder into the vagina. The case is still under treatment, and I have not yet been able to close the fistula completely, a pin-hole opening being still left, but it has gone far enough to show me that it will be a success, and I mention it now, partly to complete the record I am giving, and partly to induce others to try the operation in similar cases.

The following is the mode of procedure which I have adopted: The night before the operation is to be performed, a purgative should be given, and if this does not act well, the next morning an enema is employed to empty thoroughly the lower bowel. The parts about the pubes should also be shaved and well scrubbed with soap and water. Early in the morning of the day of the operation a pill of five grains of quinine should be taken, and repeated every two hours until fifteen or twenty grains of quinine have been administered, and slight cinchonism produced. After the anæsthetic has been given, and the patient placed upon the table, the parts should again be washed with green soap and hot water, a stiff brush being employed to make the cleansing thorough. The parts should then be bathed with a solution of bichloride of mercury 1 : 2000. The only instruments likely to be required are a scalpel, tenaculum, and a pair of small forceps. These should be placed in a tray containing carbolic acid and hot water, 1 : 40. The next step is to clean the bladder by washing it out with a weak solution of carbolic acid and hot water. A soft-gum catheter is introduced and the bladder washed until the fluid returns free from sediment; in this way the wound about to be made is kept from coming into contact with foetid alkaline urine, mucus, and pus which the bladder often contains. Before removing the catheter, let all the fluid escape. An empty gum bag which holds about twelve ounces of water should now be well oiled, folded upon itself, and introduced into the rectum above the internal sphincter muscle. A skillful assistant should perform this office, saving the operator loss of time in cleansing and disinfecting his fingers after the bag has been introduced, and inject into it about twelve ounces of warm water. This should be done slowly and gently, and force avoided. The bag, when



filled, pushes the bladder out of the pelvis and above the pubes.

If properly done this lessens the danger and difficulty of the operation. The rectal distention is of great importance; if complete, it removes all danger of encountering the peritoneum. After the operation is completed and the bag is removed the bladder drops back into the pelvis. This makes the track from the bladder to the wound in the skin pass from below upward and forward, and, when the wound is reduced in size to that of the natural urethra, the fistula or artificial urethra has the same relation to the bladder that the spout has to a coffee-pot. If no rectal bag is at hand I would use a pig's bladder, or distend the rectum with sponges; or an assistant with two fingers in the rectum could push the bladder upward and forward. The next step is to fill the bladder with a weak solution of carbolic acid and hot water; probably it will hold six or eight ounces. The use of force should be even more carefully avoided here than in filling the rectal bag. If the capacity of the viscus has been diminished by disease any attempt to enlarge it by forcible dilatation is unjustifiable. As soon as the bladder is seen or felt above the pubes the injection should cease. In some experiments made upon subjects with contracted bladders, I found, when the rectal bag was well filled, that the bladder became prominent above the pubes when only two or three ounces of fluid were used. A catheter may be employed to inject the bladder, but I prefer simply to introduce the small nozzle of a Davidson's syringe into the urethra, say one and a half inches, bend the penis slightly back toward the anterior abdominal wall, making thus a gentle curve of the urethra, and to send the water through this curve from the syringe into the bladder. As soon as any resistance is felt, or as soon as the bladder can be seen or felt like a ball above the pelvic brim, the injection should cease, even if there is little or no resistance. The penis should now be tied near its base with a piece of rubber tubing, or with a gum catheter, to prevent the escape of water, or an assistant may grasp the organ and hold it down between the patient's thighs, out of the way of the operator.

Beginning now with the knife, three inches above the upper border of the symphysis pubes, varying the length according to the amount of fat and thickness of the abdominal wall, a vertical incision should be made down to the pubic bone. This cut should pass through the skin, fat, and cellular tissue down to the linea alba. The linea alba should now be divided, the incision through this structure being from one-half to three-fourths of an inch shorter than the one through the skin, but it should be carried down to the pubic bone, and the shortening be

made at the expense of the upper end of the wound. Now, with the handle of the knife separate the recti muscles until the transversalis fascia is reached. There is no necessity for dividing any portion of the attachment of the recti muscles to the pubic bone. Make the dissection vertically, and carefully keep in the median line. The transversalis fascia should now be caught with the forceps, nicked, and divided with the point of the knife; if the operator prefers, he can divide the fascia upon a grooved director. The cut through this structure should not be over two inches long, but division should be made down to the pubic bone. Again, with the handle of the knife, divide the fat and cellular tissue under the transversalis fascia lying between it and the wall of the bladder. Be careful not to disturb this loose cellular structure any further than is absolutely necessary. Careless or rough manipulation here may lead afterward to urinary infiltration. The loose connective tissue just behind the pubes should especially be left undisturbed.

In this space between the transversalis fascia and the bladder sometimes, but not always, may be seen large and engorged veins. They, of course, should be avoided if possible; but, if cut, will cease to bleed when the bladder is emptied and the rectal bag removed. When the bladder is exposed, the tenaculum is passed through its walls, the viscus pulled a little forward and opened with the scalpel. The water will be seen escaping by the side of the tenaculum and the knife. In old cases of prostatic enlargement the bladder walls are thick and tough, and cannot be stretched with the finger, as can the bladders of younger subjects upon whom the high operation for stone is made. So, after the knife has entered the bladder, and is withdrawn, cut, in the median line, an opening large enough to admit the index finger of the left hand.

Let the finger follow the knife quickly, so that it may enter the bladder and thoroughly explore it before all the water has escaped, and do not withdraw the tenaculum until the finger is fairly in the viscus. Make the opening in the wall of the bladder as low down as can be safely done. Let it be opposite the upper border of the pubes, and not higher. A soft-gum catheter should now be introduced into the bladder through the abdominal wound, and the distal end of the catheter dropped into a cup placed at the side of the patient. If the catheter gives rise to vesical tenesmus, or is the source of annoyance to the patient, it may at once be removed. Otherwise it will be better to let it remain some hours, for the sake of cleanliness and to give the wound time to glaze. The wound is now simply covered with absorbent cotton, which should be changed as often as it becomes soiled. The patient can lie in any position he prefers or change his po-

sition as often as he desires. The drainage of the bladder is complete with or without the catheter, no matter what the position of the patient. In the suprapubic cystotomies that I have seen the loss of blood has been slight and the shock of injury has been trifling. In none of my cases have I encountered the peritoneum. After a few weeks it will be necessary to keep in the artificial urethra a silver or a hard-rubber plug, for an hour or so every day, to keep it from closing.

#### GASTRIC ULCER.<sup>1</sup>

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WHAT I have to say in opening this discussion will be much compressed, and will relate almost wholly to the clinical aspects of the disease, leaving its pathology to be discussed by others.

I propose to speak only of the simple or round ulcer, described more particularly by Cruveilhier and often designated by his name. This occurs singly, as a rule, but in some cases there are two or more ulcers. Their general characteristics are a circular form, greater diameter at the mucous surface than near the peritoneum, and sharply cut edges, which in recent cases are flat and soft, in chronic cases elevated and indurated.

The ulcers vary in size from one or two inches in diameter to an opening that will barely admit the end of an ordinary probe. They occur usually in the lesser curvature and on the posterior wall of the viscus. Their tendency is to destroy successively the various layers of the stomach and ultimately to result in perforation. This latter event, however, is anticipated in the majority of cases by adhesions to a contiguous organ, as the liver or pancreas, and the floor of the ulcer is then made up of the tissue of the organ involved. When the ulcer is situated on the anterior wall of the stomach such adhesions are not readily formed, and an opening is likely to take place into the peritoneal cavity.

The smaller ulcers more frequently result in perforation than the larger ones, the tendency of the ulcerative process in the former seeming to be to attack the successive layers of the stomach rather than to spread laterally in the superficial coats.

The process is in some cases acute and in others very gradual. Healing may take place at any stage of its progress. Often there is a succession of ulcers at varying intervals of time, and the disease may be protracted in this way for many years.

These ulcers or their cicatrices are sometimes discovered post-mortem when there is no history of

any stomach affection during life. Such cases, having no clinical history, are chiefly interesting as curiosities of morbid anatomy.

Gastric ulcer occurs much more frequently in women than in men. The ratio is usually stated as two to one. My own experience would incline me to rate it higher, more nearly in the proportion of three to one. In women it is most common between the ages of eighteen and thirty and after fifty. In men its frequency is about the same in the different periods of life, with a slight preponderance in favor of old age.

The subjects of this disease are generally found among those whose nutrition is in some way faulty. Anæmic and chlorotic girls furnish the greater number. In this country it is of very common occurrence among young female servants. Probably the reason for this is to be found in the unhygienic conditions incident to their habits and mode of life.

The disease is very commonly associated with dyspepsia, and it is often difficult to determine the point at which the symptoms of the one affection merge into those of the other.

The pathology of these ulcers has been the subject of much discussion, and particularly the share which the digestive fluids have in their production. It would not be profitable to follow out the various arguments which have been presented in support of the different theories, but I think that from the facts recorded we may safely deduce the conclusion that in conditions of diminished vitality, either general or local, an abrasion of the mucous membrane, however produced, is liable to be the starting-point of an ulcer. It seems clear that while the healthy epithelium of the stomach is proof against the solvent action of the gastric juice, the underlying structures are subject to erosion when they come in contact with it, and especially if the resistance of the tissues has been impaired by previously existing malnutrition.

Clinically there are four principal ways in which gastric ulcers may behave:

1. There may be perforation without any notable preceding symptoms.
2. There may be hæmorrhage as the first symptom.
3. There may be symptoms of gastric disorder for a variable period, and then hæmorrhage or perforation may take place.
4. There may be a more or less protracted disorder of the stomach without hæmorrhage or perforation, and terminating either in recovery or in death from exhaustion or from intercurrent disease.

In a certain very small proportion of cases a person previously in fairly good, though seldom in robust health, usually while engaged in some kind of muscular effort, suddenly experiences extreme

<sup>1</sup> Read before the Clinical Society of the New York Post-graduate Medical School and Hospital, March 29, 1890.

pain in the region of the stomach, immediately followed by prostration and faintness, or perhaps collapse, and in a very brief period the symptoms of general peritonitis are fully declared. The autopsy discloses a perforation of the stomach the result of a simple ulcer. The progress of the ulcer has not been marked by any symptom sufficiently decided to arrest the attention of the patient, and the appalling result takes him wholly unawares. The ulcer in these cases is usually small and its progress rapid, but as to this latter point the evidence at the autopsy is not always conclusive.

In certain other cases, under precisely similar conditions, a sudden hæmorrhage takes place followed by hæmatemesis. The loss of blood may be so great as to destroy life in a few hours or even minutes. But in the majority of cases the bleeding soon ceases, either permanently or to return after a short interval. There may be a number of these bleedings in quick succession, rapidly exhausting the patient, or the recurrences may be separated by months or years, the patient in the interval enjoying his usual health. When death occurs as the result of this kind of hæmorrhage, an ulcer is found which has opened a vessel of considerable magnitude. As the vessels ramify principally in the submucous coat an ulcer may cause hæmorrhage without endangering perforation.

Such a hæmorrhage may be recovered from, and little or no subsequent inconvenience be experienced, or it may be the beginning of a train of gastric symptoms, including perhaps other hæmorrhages.

Again, a patient may suffer for a variable time with pain, epigastric tenderness, vomiting, and other symptoms of gastric disturbance, which will be dwelt upon at greater length hereafter, and then hæmorrhage takes place or the symptoms of perforation are suddenly developed.

And lastly, the pain, vomiting, etc., referred to above may continue for an indefinite period, constituting the only symptoms of the disease, and leaving the diagnosis perhaps obscure and doubtful. The patient may be worn out at last with suffering and inanition, or may succumb to some intercurrent disease, the autopsy revealing one or more open ulcers and perhaps the cicatrices of others. Or, after a period of suffering, more or less protracted recovery takes place, and we can judge that an ulcerative process has been present only by excluding all other conditions capable of producing the symptoms observed.

Let us now examine the symptoms of gastric ulcer a little more in detail. The first, most prominent, and most constant of these is pain. It occurs in some degree in all cases excepting those in which death results from a single overwhelming hæmorrhage. It exists usually in two forms. The first,

which is almost constant, or at least present for considerable periods, is of a comparatively dull, aching character, varying from a mere uneasiness to a heavy, grinding pain. It is similar to that found in chronic gastritis, and probably is due as much to the inflammation which usually accompanies the ulcer as to the ulcer itself. It exists in some degree during the intervals of digestion as well as while food is present in the stomach. At times, however, it assumes an intense neuralgic character, and radiates to the surrounding parts. It may be so severe as to induce syncope. At such times it resembles in character the pain of nervous gastralgia, but unlike this it is usually, though not always, increased by taking food. The other form of pain, and the one which is more distinctive of the disease, is produced by the contact of food with the sensitive surface of the ulcer. It begins shortly after the food is taken, and gradually subsides as the stomach becomes empty. It is much influenced by the quality of the food ingested. Food which contains coarse and irritating particles or is acid or acrid in its nature provokes a more severe reaction than that which is bland and neutral in its properties. Substances which are very hot or very cold when taken into the stomach increase the suffering. The pain is variously described as burning, piercing, grinding, etc. It is very accurately localized in a circumscribed place, usually about the xiphoid cartilage. Sometimes change of posture will give relief by removing the contents of the stomach from the sensitive point, and by this test we may be able to judge of the situation of the ulcer. Very frequently the pain "runs through to the back," as the patient expresses it, and is felt with great intensity at a point directly opposite to the spot in front. At other times it radiates through the dorsal region, or may be felt between or beneath the scapulæ. From my experience I am inclined to attach much diagnostic significance to this dorsal pain. I have very seldom found it wanting in unequivocal cases of gastric ulcer, and I do not remember to have seen it pronounced in any case of gastric disease in which ulcer could be positively excluded.

Epigastric tenderness is very generally present. It is definitely localized, and may be elicited even when pain is not present. Pressure sometimes does not cause pain immediately, but after a brief interval, and the pain so induced may become a severe paroxysm. I have known the examination by the physician, when somewhat energetically carried out, to result in intense and protracted suffering to the patient. Pressure on the epigastrium is often felt more acutely in the back than at the point where it is exercised. As shown by Hilton, the pain is sometimes felt at distant points in the track of communicating nerves.



Next to pain, the most prominent symptom is vomiting. It does not occur in every case, but its entire absence is rare. It does not differ essentially, however, from the vomiting of dyspepsia, unless the vomited material contain blood in considerable quantity. Slight hæmorrhage may occur with the vomiting of chronic gastritis, but it rarely amounts to more than streaks of blood in the vomited matters. The vomiting in ulcer is excited for the most part by the presence of food in the stomach, and seems to be provoked by the pain which the food excites. To this pain it brings at least partial relief. It is of no positive diagnostic value, except when it takes the form of hæmatemesis. The blood is then pure, and if thrown off soon after it is extravasated it is fluid and bright red. If retained in the stomach for a time it comes up more or less clotted and changed to a dark color by the action of the gastric fluids. The quantity may be only a single mouthful or it may amount to pints or quarts. If a large vessel is opened the hæmorrhage may be promptly fatal. The vomiting contributes to this result by interfering with hæmostasis at the bleeding-point. More commonly the loss of blood, assisted, no doubt, by the mental shock, soon reduces the heart's action to a point which permits a coagulum to form in the divided vessel, and the bleeding is arrested, at least for a time. But when the force of the circulation is restored, and particularly if vomiting should again be excited, the coagulum, softened meanwhile by the action of the gastric juice, is likely to be displaced and the hæmorrhage to be renewed. In this way it is common to see a succession of hæmorrhages during several days, which may then prove fatal or may be permanently arrested.

If the blood effused into the stomach be not too great in amount there may be no hæmatemesis, the entire quantity passing off by the intestinal canal. If the peristalsis is active the evacuated blood may be but little changed. But, as a rule, it is retained for several hours in the intestinal tube, and when voided has the color and consistence of tar, having been acted upon by the intestinal secretions and blackened by the sulphurous gases with which it has come into contact.

In all cases of suspected gastric ulcer the patient or nurse should be instructed to observe the evacuations carefully, as otherwise a hæmorrhage not sufficient to cause emesis might escape detection.

Profuse hæmorrhage from the stomach is strongly suggestive of gastric ulcer, but it is by no means pathognomonic. It is often seen in cirrhosis of the liver, and it may occur in gastric cancer. On the other hand, the coffee-grounds vomit, so characteristic of the latter affection, may be occasioned by slow oozing from a gastric ulcer.

Perforation into the free cavity of the peritoneum

necessarily entails general peritonitis. But the wall of the stomach may be perforated without communicating with the peritoneal cavity. Adhesion with the abdominal wall, with the liver, pancreas, spleen, or diaphragm may prevent such a result. A gastro-colic fistula may be formed, or the diaphragm may be ulcerated through and a communication established between the stomach and the pleural cavity or the pericardium, giving rise to violent inflammation of the serous membrane. Adventitious cavities are sometimes formed by adhesions between the stomach and adjacent parts, these cavities communicating with the stomach and being filled from its contents. In a case under my observation during the past winter such a cavity formed between the stomach and the diaphragm. It was large enough to hold a pint of fluid. The irritation from it was communicated to the left pleura and to the pericardium, causing inflammation of each. There was also consolidation at the base of the left lung. Two attacks of general peritonitis occurred, induced, probably, by leakage from the cavity into the peritoneal sac. The last of these attacks proved fatal.

The existence of the cavity was not diagnosed during life. Its edge only pre-enting toward the front, the narrow line of dulness which it occasioned was confounded with that of the liver and heart.

The remaining symptoms which accompany gastric ulcer, if not actually due to the associated gastritis, so closely resemble those of that affection that they have little or no diagnostic significance, and, as to follow them in detail would unduly prolong this paper, I will omit them.

The treatment of gastric ulcer is chiefly dietetic. Our object being to promote the healing of the ulcer or ulcers, our first care must be to remove all avoidable causes of irritation. Solid food is irritating in two ways: first, through the mechanical effect of contact with the denuded surface; and, second, through the peristaltic action which it excites in the stomach. Hence the first requisite of the food is that it be liquid or at least semi-fluid. By universal consent milk is selected as the basis of the diet. But if given in its ordinary form it is likely to produce tough, firm curds, which are as harmful as solid food. This is effectually prevented by peptonizing, and this process has the further advantage that it greatly facilitates digestion and absorption. The single drawback is, that it gives to the milk a bitter taste, which is very objectionable to most patients. This difficulty may be obviated by adding a small quantity of coffee, which entirely masks the bitter taste and is in no wise objectionable. The further addition of a little sugar makes it still more palatable. Milk thus prepared should form the exclusive diet for the first week of treatment. After this, mutton, chicken, or

beef broth may be added. It is better that enough should be given at a time to permit a considerable portion of the gastric mucous membrane to exercise its absorbent function at once, rather than to tease the stomach with frequent small doses which must be taken up by a correspondingly small absorbing surface. But the total quantity should never be more than can be easily disposed of by the stomach. If this amount is not enough for the needs of the system it should be supplemented by nutritive enemata. Indeed, in cases of great gastric irritability it is better to depend entirely upon this method of alimentation and to give the stomach complete rest until its condition improves.

The return to solid food should be very gradual. To the milk and broth may be added, after a time, some of the prepared foods for infants, such as Nestlé's, or Carnrick's, or "Imperial Granum." Raw or soft-boiled eggs may be permitted a little later, then scraped raw beef, boiled sweetbread, boiled breast of chicken, etc. The slightest aggravation of the symptoms, meanwhile, should be the signal for a return to simpler diet.

In the way of medication it is doubtful whether anything which the stomach would retain would be active enough to modify in any degree the condition of the ulcer. I believe, however, that benefit would be derived from one-fourth to one-half grain doses of nitrate of silver, dissolved in an ounce of water and taken while the patient is lying on the right side, supposing the ulcer to be in the usual situation toward the pyloric end of the stomach. If the medicine excited nausea its action could be checked at once by a swallow of a weak solution of sodium chloride.

The Carlsbad salts are found useful to correct the gastric catarrh which is generally present. According to Welch, one or two teaspoonfuls dissolved in a half-pint or a pint of water, at the temperature of 95°, should be given in divided doses before breakfast each morning, with the object of acting upon the bowels.

The presence of acid in the stomach not only interferes with the healing process, but also adds greatly to the pain. Hence antacids are often indicated, and I know of no other so well calculated for this purpose as the precipitated hydrate of magnesia or "milk of magnesia," as it is called. This preparation, which has much the appearance of and tastes somewhat like milk, is perfectly bland and un-irritating, and its neutralizing power is very great. Another advantage which it has over sodium bicarbonate is that it does not cause the evolution of carbon dioxide, and thus add to the flatulent distention of the stomach.

Milk of magnesia is prepared by precipitation from a solution of magnesium sulphate by the addi-

tion of ammonia. By repeated washings the ammonia is removed, enough water being left at the last washing to keep the flocculent hydrate in suspension.

The pain will generally become bearable under the use of a proper diet, but in some cases it may be necessary to resort to opiates. The danger of contracting the opium-habit must always be borne in mind if this drug is employed.

The vomiting, if not restrained by proper diet, is best controlled by giving bits of ice and by applying ice to the epigastrium. The occasional use of hypodermic injections of morphine for this purpose may be allowable. If these means are ineffectual, all use of the stomach should be suspended for a time and rectal alimentation resorted to.

Hæmorrhage calls for absolute rest, the administration of ice, and cold to the epigastrium. As the gastric artery runs from left to right along the lesser curvature of the stomach, decubitus on the left side gives the advantage of gravitation in the arrest of hæmorrhage, supposing the ulcer to be located toward the pylorus. This position has the further advantage of removing the contents of the stomach from the bleeding point.

The use of astringents and other direct hæmostatics is of doubtful utility. They are very apt to excite vomiting, and diffused, as they must be, over so large a surface their action upon the bleeding point can scarcely be appreciable.

Ergot is generally recommended, but I cannot consider this other than one of the too common abuses of this drug. Its action upon the vessels is confined to the arterioles, and when a vessel of larger size is opened ergot can have no other effect than to obstruct the collateral circulation and thus to increase the tension in the proximal portion of the bleeding vessel. Ergot is of great value in capillary hæmorrhage, for it then acts as a ligature to the smaller vessels. Therefore we might prescribe it (hypodermically of course) in the gastrorrhagia of cirrhosis of the liver; but it is wholly out of place in the hæmorrhage of gastric ulcer.

The rectal alimentation during and after hæmorrhage may be in the form of peptonized milk, with or without the addition of raw eggs; or strong animal broths may be preferred. Digested meat, such as the preparation of Leube or of Rudisch, is a convenient and efficient material. Carnrick's Beef Peptones have been used extensively with good results.

But according to my experience the best possible rectal food is defibrinated blood. It is very readily absorbed, the corpuscles as well as the serum being taken up. This is shown by numerous instances in which the dejections from the bowels during this treatment have been found of a normal color and

absolutely free from all appearance of blood. That blood thus absorbed directly into the circulation requires less elaboration before assimilation by the tissues than any of the usual rectal foods, goes without saying.

It is my habit to order it in all cases of hæmatemesis, and to continue its use in smaller quantities for two or three weeks after the stomach has resumed its functions. I continue its use in order to overcome the profound anæmia usually present, and I know of no other remedy equally efficacious. About three ounces every fourth hour will be sufficient when no food is taken by the stomach. The bowel should be cleansed once a day with a large enema of tepid water.

During the early part of the treatment of gastric ulcer, whether hæmorrhage has taken place or not, the patient should not be permitted to rise from the bed, and later, when the tendency to vomiting has ceased, only the most gentle movement about the room should be allowed. Only after all the symptoms have been absent for some weeks can the patient safely resume his usual occupations.

#### THE MODERN TREATMENT OF VESICAL CALCULUS IN MALE CHILDREN.<sup>1</sup>

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UNTIL comparatively recent times the very low mortality of perineal lithotomy in children in the hands of skillful operators made it seem a work of supererogation to seek for a better method of operation. A safer could scarcely be found. A high rate of mortality after lithotomy was almost always due to deaths among elderly adults. Fergusson long ago said that it would be difficult to name any single operation of magnitude which was more successful on young subjects than lithotomy, quoting a series of 105 cases operated on at the Norwich Hospital with only three deaths, as evidence of the correctness of his statement. Brodie said, "in boys under the age of puberty lithotomy is so simple and so generally successful that we ought to hesitate before we abandon it for any other kind of operation." These opinions were reiterated by surgical teachers almost without exception, from those days until some six or seven years ago. Velpeau enumerated as the objections to lithotomy before puberty "the want of development of the sexual organs, the small diameter of the urethra, the indocility of the patients and the extreme sensibility of the parts." In 1884, Surgeon-Major Freyer, an accomplished lithotritist, and a lithotomist who had cut for stone in boys 132 times consecutively with-

out a single death, repeated Velpeau's assertions almost in the same words, objecting to the crushing of stone in boys on account of the undeveloped condition of the genito-urinary organs, the smallness of the bladder, the narrowness of the urethra, and the liability to laceration of the vesical and urethral mucous membrane. He added that no instruments had been invented by which litholapaxy could be performed with safety in male children.<sup>1</sup>

Other objections have been advanced from time to time, mainly, however, relating to the same anatomical points, and (before the introduction of litholapaxy) to the difficulty of getting rid of the fragments. As late as 1888 Keyes wrote that, on account of the limited proportions of the male urethra before puberty, the excessive sensibility of the child's bladder, and the want of docility and self-control at that time of life, lithotomy is to be preferred in male children under the age of fourteen. He makes exception in favor of very small stones, and quotes in a foot-note the more recent results of litholapaxy in children.

Many similar expressions could be quoted from the writings of surgeons of all degrees of experience, but they emphasize chiefly the same points, the majority of which are now, in the light of the modern improvements in lithotritry, without applicability. Anæsthesia has made the "extreme sensibility" of the parts and the "indocility" of the patients of little moment. Otis has shown that in children, as in adults, the "small diameter of the urethra" may be greatly increased with entire safety;<sup>2</sup> antiseptics during and after the operation has minimized the danger of laceration of the mucous membrane; instruments have been made which are at the same time small enough to permit of their introduction into the urethra and bladder of young infants and strong enough to deal with very large and very hard calculi; Bigelow has overcome the difficulty of getting rid of the fragments; and the argument from statistics is at least neutralized by the records of Keegan and Freyer, the former having performed

<sup>1</sup> The difficulty of obtaining suitable instruments for the crushing of stone in children is still very great. I found it quite impossible two years ago to get reliable lithotrites of the proper size. On giving an order to Weiss later (in the summer of 1889) I was told that I could not be supplied for many months, and I finally secured those I now have only through the kindness of a London friend (Mr. Frederick Treves) who brought them to me, having himself had considerable trouble in procuring them. I add this note for the information of American surgeons who may contemplate employing litholapaxy in children in the near future.

<sup>2</sup> He says that the proportionate relation between the circumference of the urethra and that of the penis, which he has already demonstrated in adults, holds good in children. Thus with a circumference of penis of one and a half inches, as in a child from two to three years of age, the size of the urethra would not be less than 16 millimetres in circumference; and this urethral calibre increases or diminishes about two millimetres for every quarter-inch added to or subtracted from the penile circumference.

<sup>1</sup> Read before the annual meeting of the American Surgical Association, Washington, May 14, 1890.



fifty-nine litholapaxies in children with but one death;<sup>1</sup> the latter, influenced by his colleague's results, having adopted the operation and performed forty-nine consecutive litholapaxies without a death.<sup>2</sup> In the face of these undisputed facts there is but one argument remaining which, to my mind, has any weight as urged against the operation of litholapaxy in children, and that is, the alleged greater probability of recurrence.

As regards the two great classes of operative procedures for the removal of calculus—the cutting and the crushing operations; all forms of lithotomy as compared with all forms of lithotripsy, and at all ages—there can be little doubt that the statistical evidence in relation to recurrence is at present in favor of lithotomy. But it should not be accepted without reservation. Many of the tables, notably those of Sir Henry Thompson and of Mr. Cadge, are based on an experience extending over many years, and antedating the introduction of litholapaxy. Those tables make the proportion of recurrence after lithotomy about 1 in 7 or 1 in 8, and after lithotripsy about 1 in 20; but, like so much of the statistical matter which our text-books and journals contain, they are useless or misleading at the present day. The two principal causes which lead to recurrence are: *a.* The failure to remove every portion of stone at the first operation; *b.* The new formation of stone in the kidney and its descent into the bladder. In the tables of Mr. Donald Day, based on the records of the Norwich Hospital, the first class includes two-thirds of all the cases of recurrence. But circumstances have altered. The employment of a large-sized evacuating tube, the immediate and thorough emptying of the bladder, the minute pulverization usually possible with completely fenestrated lithotrites, the increased knowledge of the great tolerance of the bladder to prolonged manipulations if they are gentle and skilful, have all combined to place the question of recurrence upon a very different level, and to make the collection of a new set of statistics absolutely necessary before venturing to draw any positive conclusions.

But if, for the sake of argument, we investigate existing statistics on this subject we find that the great majority of cases of relapse or recurrence have taken place in patients past middle life, and especially in very old persons with enlarged prostates and feeble or atonic bladders.<sup>3</sup> It will be recog-

nized at once that these conditions do not prevail in children. The prostate is undeveloped; the bladder is almost an abdominal organ; no pouch exists at the fundus; sacculation is nearly or quite unknown; cystitis is a comparatively manageable complication; the expulsive power is proportionately greater than in the male adult, in whom a "physiological atony" is not at all infrequent. In addition to these reasons for not anticipating the formation of new calculi in children around nuclei of vesical origin it may be reasonably expected that the conditions favoring the development of renal calculi will be more easily treated and controlled in children than in adults. Certainly among well-to-do people who can carry out a proper system of diet and medication it is fair to suppose that the lithic diathesis, of whatever variety, will be more readily combated in children whose diet and drugs and mode of life can be rigidly administered, than in adults with fixed and often very prejudicial habits.

For these reasons, while admitting that the question of recurrence is still *sub judice*, I am distinctly of the opinion that there is little probability that there will be enough difference between the proportions of relapses in children after lithotomies and after litholapaxies to justify any decided preference on that ground alone.

The position of litholapaxy in children is moreover strengthened by a review of the history of lithotomy which, unlike the operation with which we contrast and compare it, has undergone but little change for many years. The improvements in suprapubic lithotomy have, it is true, rendered it applicable to a much wider range of cases, and it is equally true that its most favorable results have been attained in children; but thus far the statistics of suprapubic lithotomy in children do not compare favorably with those of either litholapaxy or lateral lithotomy. This is probably due to the fact that in a large proportion of cases the operation was selected only after litholapaxy had been attempted and failed, or else was originally chosen on account of the unusual character of the calculus.<sup>1</sup>

It will probably always be employed in preference to lateral or median lithotomy in cases of extremely large or exceptionally hard stones, but when we remember that Freyer has removed by litholapaxy a calculus weighing 808 grains from a boy of nine, and Keegan one of 700 grains (and of uric acid) from a boy of nine and a half, it is evident

<sup>1</sup> Due to laceration of the bladder and urethra during the withdrawal of an unsuspected foreign body two inches in length, introduced through the rectum.

<sup>2</sup> Cadge places the general mortality after perineal lithotomy in children at 5 or 6 per cent.: after litholapaxy, at not more than 2 or 3 per cent. Fenwick has collected 106 cases of litholapaxy in children from one to fifteen years of age with 1 death, a mortality of 0.9 per cent.

<sup>3</sup> Mr. Cadge expressly states that this was true in his own cases,

and adds that he has no personal experience of lithotripsy in children.

<sup>1</sup> It is true that MacCormac has reported (The British Medical Journal, March 19, 1887) 33 cases of suprapubic lithotomy without a death, but they were from scattered sources, and did not constitute a consecutive series. There is no means of knowing how many unsuccessful, and therefore unreported, cases occurred during the same period.

that neither size nor hardness offers an insuperable bar to the latter operation.

Median lithotomy in children, although advocated by some surgeons, is objectionable on account of the greater danger of wounding the bulb or the rectum, and the difficulty in obtaining space through which to pass the finger into the urethra and the bladder. It is indeed true that the passage of the finger is not absolutely necessary, although it has always been one of the time-honored rules of lithotomy not to withdraw the staff until the finger is in contact with the stone. I have, however, frequently seen Dr. Agnew, when operating on young children introduce a pair of very small lithotomy forceps along the groove of the staff, separate them and seize the stone, and then, after the removal of the staff, extract the calculus the finger never having been in the bladder. I have used the same manœuvre myself with success. I supposed it was original with Dr. Agnew (and believe he was of the same opinion), but I found that Mr. Cadge<sup>1</sup> recommended almost precisely the same method as both safe and efficient, adding, "I dare say it has been adopted by others but I do not find it alluded to in modern text-books." It must be remembered, however, that its adoption places the surgeon in almost the same situation in regard to the possibility of leaving débris or unnoticed stones in the bladder, as he occupies after a litholapaxy. If the stone is soft and breaks down under the forceps, or if there are multiple calculi, he will be dependent on the touch and sound elicited by the vesical explorer just as after the other operation. If then the introduction of the finger be dispensed with in either median or lateral lithotomy in children these operations lose one of their alleged advantages, viz., the assurance of the absolute removal of all calculous fragments. If it be insisted upon it constitutes in a small proportion of cases an unavoidable source of both difficulty and danger. Sir William Fergusson, Keith, Thompson, Cadge, and many others have recorded occasional trouble with this step of the operation. The latter surgeon remarks, *apropos* of Fergusson's case: "He was a master of the art of operative surgery; if the difficulty occurred to him we may conclude that it is not unlikely to occur to any of us."

Lateral lithotomy in children in addition to the special difficulty due to the smallness of the parts, the high position of the bladder above the pelvis, the delicacy and mobility of the deep urethra and the vesical neck, has one possible contra-indication which should not be lost sight of. If the incision be prolonged a little too far backward the left ejaculatory duct can hardly escape division and subsequent obliteration, and although this may not be a serious accident in cases in which the integrity of

the opposite half of the genitalia, the testicles, duct, etc., is unimpaired, yet it leaves the patient entirely dependent on that one side for fertility if not for potency. Mr. Teevan has reported four cases of sterile husbands among lithotomized patients. Langenbeck and Sir William MacCormac have called attention to the same danger, and Keegan believes the lateral operation to be frequently followed by emasculation. Dennis quotes Dr. Charles Leale in relation to several cases, coming under his own observation, in which such patients grew up with shrill voices, atrophied testicles, absence of hair upon the face, etc.; in fact with all the characteristics of eunuchs. The evidence as to this point is as yet fragmentary and inconclusive, but is of sufficient importance to deserve careful consideration.

These objections to perineal lithotomy in children are at least as weighty as any that have been urged against litholapaxy. The ease and satisfaction to both patient and surgeon with which the latter operation may be performed, I can best illustrate by a brief abstract of one of my own cases:

C. W., a small boy, aged five and a half, was brought to me by his father in October, 1889, on account of nocturnal incontinence of urine. He had a long, tightly adherent prepuce with pin-point aperture. It "ballooned" at each act of urination. I circumcised him; gave small doses of belladonna and bromide of sodium, and dismissed him, apparently cured, in November.

In January he was brought to me again by his nurse, who told me that his symptoms had returned. I then sounded him for stone, but failed to find it. Insisting (according to my invariable rule in such cases) upon a second examination before giving a positive opinion, I easily found a calculus. I recommended crushing, and after a little delay the parents consented. On February 20th, the child being etherized, I drew off the urine and injected three ounces of warm boric acid solution (fifteen grains to the ounce) into the bladder. I then enlarged the meatus<sup>1</sup> and introduced a Weiss fenestrated lithotrite—No. 16 French. This went in with ease. The stone was readily seized and broken. I spent twenty-five minutes in pulverizing it, paying especial attention to gentleness of movement and to the avoidance of rude or unnecessarily wide separation of the jaws of the instrument. A No. 16 tube was then introduced and a Bigelow evacuator employed. In about eighteen minutes,<sup>2</sup> as no more fragments

<sup>1</sup> Otis recommends performing the meatotomy long enough before the litholapaxy to allow the parts to heal. This is certainly desirable for some reasons, but in nervous children its advantages are counterbalanced by the need for two fixed appointments, two operations, etc. I have never found any harm resulting from the plan I here followed.

<sup>2</sup> The pressure on the rubber bulb during the process of evacuation should be slight and frequent rather than slow and vigorous. Prof. Bigelow, himself, called my attention to the much greater value of the former method, and I have repeatedly verified the correctness of the statement. Not only is the danger of driving back into the bladder sharp fragments of stone, materially lessened,

<sup>1</sup> Hunterian Lectures, 1886.

or dust could be perceived, the tube was withdrawn and the bladder carefully explored with a vesical sound. Nothing was discoverable.

The time of operation was forty-three minutes; weight of dried calculus, 170 grains. The child was sitting up in bed on February 22d, and was out of bed, playing about the room, on February 25th. The nocturnal incontinence persisted for a week or ten days, and then disappeared entirely. There was no fever, bleeding, chill, or other alarming symptoms.

The parents were nervous, consented reluctantly to this operation, and would certainly have postponed a lithotomy for a long time, much to the little patient's detriment.

This is a typical case of litholapaxy in a young boy. It can scarcely be wondered at that after an experience of dozens of such cases Keegan writes that he would as soon think of cutting an old man for the removal of a small stone as of performing lateral lithotomy on a boy whose urethra would readily admit the passage of a No. 8 (No. 15 French) lithotrite and whose stone was neither abnormally large nor hard. Nor is it surprising that Freyer says that lithotomy in the adult having been practically blotted out of his practice, he looks forward confidently to lithotomy in children meeting with a similar fate. Cadge, MacCormac, Jacobson, Kingston, Keyes, Hunt—indeed, most recent writers—press the conviction, though in less sweeping terms, that the field of litholapaxy in children is likely to be considerably enlarged in the near future.

For myself, basing my opinions on the facts mentioned in this paper and on my personal experience, I believe the following conclusions to be justifiable:

1. In every case of calculus in male children<sup>1</sup> litholapaxy, on account of ease of performance, low mortality, speedy recovery, and absence of danger of emasculation, should be the operation of predilection, division of the meatus being freely resorted to if that portion of the urethra offers an obstacle to the introduction of instruments.

2. The lithotrite and evacuating-tube should be of a size which can be inserted into the bladder without much effort or over-distention, and great gentleness should be observed in passing these instruments.

3. They should be withdrawn and reintroduced as seldom as possible, the stone being finely pulverized before the lithotrite is taken out at all. In seeking for or attempting to seize the stone, care should be taken to avoid such wide separation of the blades as will bring the male blade in frequent con-

tact with the vesical neck. The crushing should invariably be done only after rotating the blades into the centre of the bladder. Every particle of the calculous dust should be evacuated.

4. Rest in bed, milk diet, and sterilization of the urine by boric acid or salol given internally both before and after the operation are valuable adjuvants. During the operation every antiseptic precaution should be observed.

5. The exceptional cases of calculi which are both large and hard may be best treated by suprapubic lithotomy, but neither unusual size nor a moderate degree of density should of itself alone be thought positively to contraindicate litholapaxy.

6. Perineal lithotomy has now a very limited field, and should be employed chiefly in those cases of stones thought to be of small or medium size in which no lithotrite, however small, can be introduced with safety.

#### THERAPEUTIC OXYGEN.

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OF NEW YORK.

THE recent translation of a French work on oxygen, and its publication with American notes and a summary of the experiences of American experimenters, have given fresh interest and impetus to the subject of the therapeutics of oxygen in this country. It is, however, amusing to note that in this somewhat prolix and plethoric volume, as originally published in Paris in 1866, Demarquay refers to the blatant claims of the original "oxygenized air" humbugs who "discovered" this wonderful cure-all (nitrous oxide) in Philadelphia about that time, as evidence of a revival of interest in Priestley's "dephlogisticated air," or oxygen!

There has been a similar confusion in the minds of physicians in this country. They have unthinkingly confounded the recent investigations of oxygen therapeutics with the silly claims of quacks who advertise "compound oxygen." No physician can intelligently study the subject until he has set aside all this specious rubbish. The old prejudice, which arose from the fact that in America the use of this agent, or something which passed for it, was, until quite recently, in the hands of the most arrant charlatans, and by them heralded as a panacea, has gradually given way, and at present some of the most earnest men in the profession are carefully experimenting with, while many others are making extensive clinical use of the agent.

The results of modern research in connection with the physiology of respiration are not yet to be considered as final. The compression chamber, the air-pump, the spectroscope, and more accurate methods of analyzing the circulating fluids, and of collecting and testing the gases of the blood, have

but the swiftness and effectiveness of the outward current are much increased. I so often see an entirely unnecessary degree of force expended in the working of the bulb during this stage of a litholapaxy, even by expert operators, that it seems worth while to make this note.

<sup>1</sup> These remarks apply almost as well to adults.



enabled modern physiologists to see a little further and more clearly than their predecessors.

The coloring matter of the blood, hæmoglobin, was first obtained in a crystalline state by Funke, in 1853. Its function seems to be that of an oxygen-carrier, transmitting the free oxygen, absorbed or appropriated from the atmosphere, to the tissues where the vital element chiefly accomplishes its various offices. Formerly oxygen was presumed to effect most, if not all, its work in the lungs themselves, and by direct combination, or so-called combustion. This theory is now practically obsolete, and with it should have gone the very general, but equally erroneous impression, that the direct inhalation of pure or unmixed oxygen is necessarily attended with inflammatory tendencies. It is now conceded that any such results supervening upon the use of this agent are directly traceable to impurities resulting from imperfect methods of preparing the gas.

Furthermore, the study of this gas as a remedial agent will never be entirely satisfactory until a more definite distinction is made between ordinary oxygen, as it exists in the atmosphere, and therapeutic oxygen. The former may be said to be in a comparatively passive condition, while the latter should, doubtless, always be *nascent*, or in a certain degree allotropic oxygen. The difference is marked and wide, but not by any means generally recognized. Modern chemists distinguish at least three states of oxygen: passive or atmospheric oxygen, which they venture to indicate by the symbol  $O$ ; nascent, or factitious oxygen, designated by  $O_2$ ; and ozone, or allotropic oxygen, represented by  $O_3$ . As the latter condition is extremely unstable, and, on account of its powerful and rapid action as an oxidizer, can be retained only in glass receivers, experimentation with it is both difficult and unsatisfactory. It is only as ozonized oxygen that it can be practically or therapeutically considered. Again, Brereton Baker has shown that the combining activity of oxygen is almost or quite destroyed if the gas be thoroughly desiccated. Charcoal, heated to redness in anhydrous oxygen, showed no signs of ignition. A volume of oxygen was dried for five years in contact with phosphorous pentoxide. In this dried gas sulphur was distilled without emitting the faintest flame; whereas, in moist oxygen sulphur burns at a temperature of  $320^{\circ}C$ . Even phosphorus could be distilled in similarly dried oxygen, while in moist oxygen it ignites at about  $60^{\circ}C$ .

Most experimenters have thus far been content to use whatever variety was available in the market—generally passive or stale oxygen; whereas, *therapeutic oxygen*, as it may be properly termed, is a far more active condition of the element. This variety is sometimes called ozonized oxygen, or “ozone

oxygen,” and probably consists of ordinary oxygen with an added trace of ozone. Failure to recognize these distinctions readily accounts for the varying results reported by different, as well as indifferent, observers. In the parlance of the day, there is oxygen and oxygen; and experimenters ought, first of all, to know what variety or condition of this element they are using.

That oxygen, in the proper or active condition, and intelligently exhibited, has a legitimate province in rational medicine seems now to have been definitely established. It is not, however, in the field of respiratory diseases that its use is followed by the most marked success, as is usually and unthinkingly assumed. Its *forte* unquestionably lies in the direction of inducing and aiding hæmatosis. Nevertheless, most scientific, perhaps because *too* scientific, observers have refused to give it much credit even in this direction, assuming that, in order to prove definite results, they must first demonstrate a definite increment or absorption of the gas, and its increased and excessive presence in the blood immediately after its therapeutic exhibition; whereas, it is rational to suppose that when used in a nascent condition its chemical affinities are so powerful and so prompt that its salutary effects may all be accomplished without leaving evidence of any appreciable excess of the agent, in a free state, in the blood.

Professor McKendrick, in an able and scholarly address delivered before the British Medical Association, announced as a result of his investigations that, once satisfied with oxygen, the hæmoglobin of the blood “becomes indifferent, within limits, to any additional oxygen,” even if the latter be forced into it under pressure. The natural inference from this observed fact is also lame and unsatisfactory, for the reason that it really proves nothing to the point, and has no reference to the therapeutic use of oxygen. It is like saying, “Here is an animal which will not eat or drink any more than it wants, and cannot be made to do so, even under the most strenuous urging.” It is rational to assume that in health the animal system appropriates exactly the needed and normal supply of oxygen, and then very naturally “becomes indifferent” to any further supply. But in disease, at least in certain diseases, there are numerous obstacles and hindrances to procuring this normal supply: confinement in a vitiated or restricted atmosphere, enforced lack of exercise, diminished breathing capacity, etc. This is the juncture at which therapeutic oxygen becomes invaluable. The starved animal eagerly devours proffered food, and with equal avidity the deprived tissues seek and appropriate the vital element.

Some interesting experiments, conducted recently at Munich, demonstrated that after a day of severe physical exertion the human system has lost about

one ounce of its normal proportion of oxygen. This loss is restored by rest and sleep; but if the rest be incomplete, if respiration be imperfectly performed, or the supply of oxygen be in any manner restricted and insufficient, gradual impairment will follow, and some form of chronic disease is finally established. The use of *therapeutic* oxygen, and it is proper to emphasize the term, is rationally indicated in all conditions in which a normal proportion of the element is presumed to be wanting. This opens to it a wide field, including a large number of chronic and some acute forms of disease. But it must be looked upon as an adjunct, not as a cure-all; at the same time more careful experimentation will doubtless prove its value in many conditions in which its use has not as yet been intelligently invoked.

The diseases in which it has thus far given most marked results are the various forms of anæmia, leukæmia, chlorosis, the indigestions, narcosis from the ill-timed use of anæsthetics or of narcotic drugs, in certain forms of asthma, and in that large class of maladies of which the original cause, whether hereditary or acquired, is found to be a vicious diathesis. Thus in lithiasis and gouty and rheumatic affections with cardiac and renal complications, decidedly favorable results have followed its persistent use.

119 EAST TWENTY-EIGHTH STREET.

#### THE EFFECT OF MERCURY UPON THE BLOOD OF SYPHILITICS.

BY EDWARD MARTIN, M.D.,

AND

H. M. HILLER,  
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IN this country the admirable paper of Keyes<sup>1</sup> upon the influence of small antisyphilitic doses of mercury upon the number of red corpuscles in the blood, first attracted general attention to this most interesting line of research. Wilbouchewitch<sup>2</sup> in an apparently careful series of investigations concluded that small doses of mercury given for a short time increase the number of red blood-corpuscles; if continued, however, this increase is followed by a diminution much more rapid than the increase, and the anæmia thus produced may be more pronounced than it was at the beginning of treatment. On stopping the mercury there is again an increase. Keyes has pointed out the fact that the doses given by Wilbouchewitch were not small, and that in all probability an undue amount of mercury was given, since the patient rapidly lost weight where this condition was observed. Keyes holds that both syphilis and excessive doses of mercury lower the number of red blood-corpuscles below the healthy standard, but that mercury in

small doses continued for a short or long time increases the number of these corpuscles both in the syphilitic and non-syphilitic. Ricord and Grassi<sup>1</sup> many years before had advanced as proven that potassium iodide increased the red blood-cells in syphilitics, while mercury had a directly contrary effect. We have not been able to find any detailed account of the amounts of mercury given by these observers, and as it was then the custom to administer the drug with an unsparing hand, we think it probable that doses much larger than necessary were given. These authors, together with the majority who have since written upon the subject, call attention to the great diminution of red blood-cells consequent upon the syphilitic poison. This belief in the direct blood-effect of syphilis is not, however, universal. Hayem<sup>2</sup> states that often there is no material change in the blood of syphilitics, though in females there may be slight anæmia, and that the red blood-corpuscles are never below 3,500,000, while the hæmoglobin ranges from 75 per cent. to 90 per cent. In regard to the action of mercury he states that it is followed by variable results.

In a first series of cases the blood lesion was improved, in another it remained stationary, and in a third it was slightly aggravated. As a conclusion Hayem states: "Therapeutic antisyphilitic doses of mercury do not have any particular effect upon the blood." In Keyes's paper the subject of the hæmoglobin richness of the corpuscles is not considered, and this is we think a matter of great importance, since it is well recognized that there may be a marked deficiency of hæmoglobin even though the corpuscular count be fairly high. Thus the immediate effect of severe hæmorrhage is to decrease both these constituent elements of blood in the same ratio. The corpuscles are subsequently replaced much more rapidly than the hæmoglobin, so that an estimation of the blood taken after a few weeks may show a large count by the hæmocytometer while the hæmometer will give an estimation far below normal. It may be fairly assumed that in normal blood when the Zeiss hæmocytometer gives a count of about 5,000,000 red blood-corpuscles, the Fleischl hæmometer will indicate about 100 per cent. of hæmoglobin. In persons of unusually robust health both corpuscles and hæmoglobin will range considerably higher. This is particularly the case with hæmoglobin. Thus, while a count of 6,000,000 is comparatively rare, we have repeatedly estimated the hæmoglobin as above 125 per cent.

Since it is important, before considering the effect of mercury upon the hæmoglobin, to know, not only what is the normal percentage of this constituent under ordinary circumstances, but also to be cogni-

<sup>1</sup> American Journal of Medical Sciences, p. 17, 1876.

<sup>2</sup> Arch. de Physiol., 1874, p. 509.

<sup>1</sup> Leçons sur Le Chancre. Fournier, Paris, 1860.

<sup>2</sup> Du Sang. Paris, 1889.

zant of the fluctuations to which it is subject in various individuals and under varying conditions in the same individual, we have carefully examined with the hæmometer the blood of five robust men, all athletes and in trained condition, with the following results:

## A. Before Exercise.

1. P., wt. 165.	Stroke of junior gig.	Hæmoglobin, 115.
2. H., wt. 143.	Bow " "	" 120.
3. B., wt. 148.	No. 2, Univ'y crew.	" 106.
4. L., wt. 172.	Bow " "	" 108.
5. W., wt. 165.	Stroke " "	" 120.

These estimates were taken immediately before a hard four-mile pull, the members of the University crew pulling an additional two miles. We had previously determined that the average loss of weight from this amount of exertion and the consequent free diaphoresis was two pounds. Thinking that there might be a marked alteration in the hæmoglobin as a result of the abundant loss of water, both through the lungs and skin, we made another estimate immediately upon the return of the crew to the boat-house:

## B. After Exercise.

1. P.	Hæmoglobin, 115.	Unchanged.
2. H.	" 120.	"
3. B.	" 112.	Gain, 6.
4. L.	" 105.	Loss, 4.
5. W.	" 125.	Gain, 5.

It will thus be seen that no marked or constant effect was produced by violent and prolonged exercise.

Penzoldt<sup>1</sup> asserts that food without drink causes an increase in the estimate of hæmoglobin of over 10 per cent., and that the ingestion of liquid (1½ litre of beer) lowers it rapidly 12 per cent. By the free sweating induced by 0.02 gramme pilocarpin, he, in three-quarters of an hour, brought the hæmoglobin estimate from 80 per cent. to 100 per cent. If these statements are reliable, but little dependence can be placed upon any of the comparative hæmoglobin calculations, since a constituent of the blood subject to such marked quantitative changes under comparatively slight causes may vary in amount quite independently of any treatment to which the patient has been subject. For the purpose of determining this point three athletic men were kept without water for some time; their hæmoglobin was then examined; they were allowed to drink freely, and, in twenty minutes, another estimation of hæmoglobin was made. The following table will show the results:

1. M., weight 195 pounds. No liquid for 24 hours. Estimate immediately after dinner. Before taking liquid, hæmoglobin 125; 20 minutes after taking liquid (1 litre), hæmoglobin 112.

2. L., weight 172 pounds. No liquid for 10 hours. Before taking liquid, hæmoglobin 125. After taking liquid (1 litre), 110.

3. H., weight 142 pounds. Did not abstain from liquid. Hæmoglobin 113. After drinking an additional litre of liquid, 113.

4. H., weight 142 pounds. No liquid for 15 hours. Hæmoglobin 120. After taking liquid (1 litre), 120.

In the first two observations there was a marked loss of hæmoglobin—upward of ten per cent. In the last two, both made upon the same individual, there was no change.

These figures show conclusively that when the hæmoglobin is examined such examinations must take place under similar circumstances, and that it is the average of many examinations rather than the results of single ones which will enable us to draw trustworthy conclusions. Thus, L., examined one day before dinner, shows a percentage of 108 for hæmoglobin; three days later, immediately after dinner, his hæmoglobin is 125; an hour and a half later, after copious draughts of liquids, his estimate is 110. In drawing conclusions from the results of blood examination the physique and previous history of the patient must also be borne in mind. Thus one of our observations shows the following:

M., hæmoglobin 120. Red blood-corpuscles 6,500,000. A reduction to the average percentage and count would, in this man, mean a decided blood change.

Again, as another difficulty in the way of rightly interpreting the hæmometer readings, must be considered the fact that many individuals of a most pronounced anæmic appearance in reality show on examination a practically normal blood. Sahli<sup>2</sup> calls attention to this fact, and Oppenheimer<sup>2</sup> confirms his observation, explaining it upon the theory of internal congestion causing reflexly an antagonistic action of the vaso-motors of the skin, as advanced by Dastre and Charcot.

It would seem, then, that while there is a so-called normal percentage of hæmoglobin, this normal is subject to wide variations; that the normal of the young trained athlete is far above that of the average dweller in cities; that even profound pallor is compatible with a full quantity of hæmoglobin; and that there is an almost hourly fluctuation in the percentage of each individual.

It will be seen at once that it is not possible to exclude all of the many sources of error. We eliminated them as far as possible, however, in our examinations of syphilitics, by making the examinations in each case as near the same hour of the day as might be. First, in regard to the anæmia produced by syphilis, we have the following observations:

1. Mrs. G., aged twenty-eight. General lymphatic enlargement; papulo-squamous eruption;

<sup>1</sup> Correspondenz-Blatt für Schweizer Aerzte, 1886.

<sup>2</sup> Deutsche medicinische Wochenschrift, Oct. 17, 1889.

<sup>1</sup> Münchener medicinische Wochenschrift, August 20, 1889.



mucous patches; iritis; periostitis. No chancre or trace of one found. Probable time from inoculation two months. Hæmoglobin 78. Red blood-corpuscles 4,500,000.

2. R. G., aged twenty-four. Healthy, rosy-cheeked young Irishman. Chancre of lip; general glandular enlargement; no skin eruption. Hæmoglobin 110. Red blood-corpuscles 5,600,000.

3. M. S., aged nineteen. Buxom Irish girl. Papulo-squamous eruption; mucous patches. Hæmoglobin 98. Red blood-corpuscles 5,000,000.

4. H. T., aged thirty. Thin and anæmic in appearance. Chancre two months since; periostitis; mucous patches; papular eruption. Hæmoglobin 80. Corpuscles 4,800,000.

5. Mrs. McG., aged forty-five. Rather pale, but apparently strong, Irish woman. Two chancres on cheek; beginning general glandular enlargement. Hæmoglobin 95. Corpuscles 5,500,000.

In three cases, then, all showing the secondary eruption, there was a decided lowering of the hæmoglobin percentage, together with a diminution, though not in the same proportion, of the corpuscular count. In the fifth case the blood was apparently not affected, though, recalling the wide quantitative variations to which the hæmoglobin is subject, it cannot be said positively that there was not also in this case a diminution.

All authors are practically united upon the fact that, coincident with the development of secondaries, syphilitic patients lose weight and become pale and chlorotic in appearance. This is usually much more marked in women than in men. Indeed the term syphilitic chlorosis has been applied to this condition. Wilbouchewitch,<sup>1</sup> Sørensen,<sup>2</sup> Keyes,<sup>3</sup> Haffer,<sup>4</sup> and others, have all stated that syphilis diminished the number of red blood-corpuscles. Schulgowski<sup>5</sup> found that not only the red blood-corpuscles, but also the hæmoglobin was diminished in quantity. Laache<sup>6</sup> arrived at similar results, and also stated that the syphilitic chlorosis is in its development closely connected with the roseola. Graeber<sup>7</sup> found both hæmoglobin and corpuscles diminished, and also observed that the red blood-corpuscles were of smaller size.

De Luca<sup>8</sup> objects to the name chlorosis, since he found no diminution in the amount of hæmoglobin, as is the case in true chlorosis. He states that in recent syphilis, in spite of the diminution in the red blood-corpuscles, the coloration remains normal. Stierling<sup>9</sup> found that about the same ratio of red

blood-corpuscles to hæmoglobin obtained in syphilitics as in healthy individuals. Lezius,<sup>1</sup> who has perhaps made the most thorough systematic examinations of syphilitic blood, finds both hæmoglobin and corpuscles always reduced below the normal standard, the former to a far greater extent than the latter. He states that the blood of the anæmia of syphilis can only be distinguished from that of true chlorosis by the fact that in the former the diameter of the corpuscle is somewhat greater than normal, while in the latter this measurement is somewhat less. Lezius further states, as the result of repeated examinations, that as a rule, during the early period of secondary incubation (chancre) the hæmoglobin percentage is normal. Later, about the period of exanthematous eruption, a rapid diminution in this element of the blood can be noted. This diminution is observed during the whole course of the specific efflorescence; as with the disappearance of the latter the percentage of hæmoglobin is again increased. In our observations we have been frequently struck with the irregularity in the shape and size of the blood-corpuscles in syphilitics, and Lezius observes that he has noted poikilocytosis in most of his cases.

The effect of small doses of mercury in increasing bodily weight was noted by Hallepeau, Damourette, Basset, and many others, before exact methods of blood examination were known; and Keyes, Liégois, Robin, and Schlesinger have asserted that this drug increases the number of red blood-corpuscles. In regard to its effect upon the hæmoglobin, however, there is not much in evidence. De Luca says mercury has no effect upon the coefficient of the ratio between red blood-cells and hæmoglobin in syphilis. Schlesinger says the hæmoglobin is increased under small doses of mercury. Lezius gave three healthy individuals antisyphilitic doses of mercury by hypodermic injection. In two the percentage of hæmoglobin was slightly increased; in one, slightly diminished. In all the red blood-corpuscles were diminished in number. Blarez states that mercury has a direct oxidizing effect upon the hæmoglobin. Our observations are as follows:

Mr. T., aged thirty. Iritis; periostitis; papular squamous eruption. Chancre three months before. November 20, 1889. Hæmoglobin 80; corpuscles 4,800,000; weight 106 pounds. Given:

R.—Blue mass . . . . . 2 grains.

Dried sulphate of iron . . . . . 1 grain.

Three times daily.

Rapid disappearance of all specific manifestations. Cod-liver oil and beef peptonoids were also given.

December 20. Signs of stomach giving out. Ordered inunction of blue ointment, 2 drachms daily. Hæmoglobin 80; red blood-corpuscles 4,600,000; weight 114 pounds.

<sup>1</sup> Blutverand. bei der Anæmie Syph., Inaug. Diss. Dorpat, 1889.

<sup>1</sup> Loc. cit. <sup>2</sup> Jahresberichte, 1876, i. p. 257.

<sup>3</sup> Loc. cit.

<sup>4</sup> Wiener medizinische Wochenschrift, 1882, No. 28.

<sup>5</sup> Petersburger medizinische Wochenschrift, 1879, p. 239 (quoted by Lezius).

<sup>6</sup> Die Anæmie, Christiania, 1883 (quoted by Lezius).

<sup>7</sup> Zur klinik Diagnost du Blutkrank, p. 42.

<sup>8</sup> Giorn. Ital., December, 1889.

<sup>9</sup> Deut. Arch. f. klin. Med., Bd. xlv. p. 75.

*January 1.* Hæmoglobin 90. Inunctions stopped. Protiodide of mercury,  $\frac{1}{4}$  grain three times daily.

*11th.* Hæmoglobin 105. Diarrhoea for one week past. Reappearance of skin eruption. Ordered inunctions of blue ointment, 2 drachms daily.

*23d.* Hæmoglobin 95.

*30th.* Hæmoglobin 100; red blood-corpuscles 5,000,000; weight 121 pounds. Mucous patches on half-arches of both sides. Ordered a potassium chlorate and tincture of myrrh gargle.

*February 23.* Hæmoglobin 115.

*March 23.* Hæmoglobin 115; weight 125 pounds.

*April 12.* Hæmoglobin 115; red blood-corpuscles 5,600,000; weight 126 pounds.

This patient has been continuously taking mercury for five months. His improvement has been progressive; his hæmoglobin has risen from 80 to 115; his red-corpuscle count from 4,800,000 to 5,600,000; his weight from 106 to 126 pounds.

Mrs. McG. Mucous patches on half-arches; general papular eruption two months after chancre.

*January 14.* Hæmoglobin 95; red blood-corpuscles 5,500,000.

*31st.* Ordered protiodide of mercury,  $\frac{1}{4}$  grain three times daily. Hæmoglobin 90; red blood-corpuscles 3,800,000.

*February 9.* Hæmoglobin 90; red blood-corpuscles 4,200,000.

*14th.* Mercury continued; regular increase of one pill a day since February 3, making fourteen pills to-day. Hæmoglobin 100; red blood-corpuscles 4,280,000. Bowels inclined to looseness; malaise.

*26th.* Fifteen pills a day since last count. Patient is weak. Hæmoglobin 106; red blood-corpuscles 4,100,000. Stopped mercurial treatment, and gave sulphate of quinine, 2 grains three times daily.

*March 11.* Eruption much more pronounced. Feels stronger and better. Hæmoglobin 80; red blood-corpuscles 3,660,000. Again put on mercury; ordered her to begin with three pills a day and to increase by one daily.

*24th.* Since last count has taken thirty-nine pills, each containing  $\frac{1}{4}$  grain of protiodide of mercury. Throat sore; mucous patches. Has slept poorly for a month. Hæmoglobin 108; red blood-cells 4,100,000. Ordered compound tincture of cinchona, 1 drachm three times daily; stopped mercury.

*April 7.* Hæmoglobin 88; red blood-corpuscles 3,650,000. Ordered potassium iodide, 10 grains, and biniodide of mercury,  $\frac{1}{2}$  grain, three times daily. Patient has not returned since.

The observations on this second patient were particularly valuable. Under very large doses of mercury her hæmoglobin percentage increased while the number of corpuscles was slightly diminished. On the mercury being stopped the hæmoglobin percentage dropped from 106 per cent. to 80 per cent., the red blood-cells from 4,100,000 to 3,660,000. A course of mercury, given in moderate doses in two weeks, brought the hæmoglobin up to 108 per cent., the corpuscles to 4,100,000. On the mercury being

stopped again the hæmoglobin fell to 88 per cent., the corpuscle count to 3,650,000.

It is to be noted that while the hæmoglobin percentage is higher than when this patient first came under observation, the number of corpuscles is considerably below that which was observed at that time.

We believe that neither the blood condition in syphilis nor the action of mercury upon the blood has yet been formulated. Each observer has seen too few cases for comprehensive conclusions. The previous condition of the patient before contracting syphilis has a modifying influence upon the blood which has not been duly considered. In opposition to Lezius we believe that in the majority of cases the diminution in hæmoglobin is less than the corpuscular count would suggest. Our observations have certainly accorded more with those of De Luca in this respect. We think it must also be granted that both corpuscles and hæmoglobin are reduced in quantity by syphilis, and that mercury prevents the reduction. That the mercury acts as a tonic remains to be proven, since increase in the number of blood-cells and in the body-weight may be the result of retarded oxidation as well as of tonic action.

We believe that the "tonic" dose for each individual must be determined by his susceptibility to the drug. Thus we have given for weeks at a time three grains of protiodide daily with beneficial effect, and again we have produced marked constitutional effects by half a grain of the same drug given three days in succession. An examination of the blood will afford a valuable guide as to the amount of mercury to be given, since an overdose produces a very rapid diminution in the corpuscular count and the amount of hæmoglobin. It must be borne in mind, however, that in the beginning of mercurial treatment there is often a falling-off of the blood condition due to the disease itself and apparently taking place before the mercury has begun to produce any effect.

It is mainly in the hope of suggesting careful examination into the subject on the part of many observers, and consequently the publication of an amount of clinical material sufficient for the establishment of general conclusions that this communication is offered.

### THREE CASES OF VARICOSE VEINS IN THE BROAD LIGAMENT.

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CASE I.—A woman, who had given birth to two children, one living, the other destroyed by the forceps, was seen by the writer after she had been in labor many hours. The child's head, while still above the pelvic canal, was tightly jammed down upon the brim; the os was well dilated, the lower uterine segment stretched to a dangerous degree.

Forceps had already been tried for several hours without success. Craniotomy was performed with no difficulty, and extraction was easily effected. A careful examination was made for a rupture of the uterus, but no sign of it was discovered. The woman did perfectly well for eighteen hours; then suddenly went into collapse and died shortly afterward. A careful post-mortem examination showed the cause of death to be a ruptured bloodvessel in the outermost portion of the left broad ligament and hæmorrhage into the peritoneal cavity. The bloodvessels of the broad ligament were, of course, enlarged, as they are in every woman who is pregnant or has been recently delivered, but it is impossible to say whether the enlargement was extraordinary, for the region was so thoroughly depleted by the profuse hæmorrhage. This was, however, probably the case, for many thousand broad ligaments are subjected to a great strain during labor without a rupture of bloodvessels within them. It is only natural, therefore, to presume that the veins were much distended and their walls thinned in this case.

CASE II.—M. N., aged thirty-nine, has had four children, the last six years ago. She has been a widow for several years. Menstruation had been regular until six weeks before the patient came under my observation; at that time, during a menstrual period, she attempted to carry a heavy coal-scuttle up a flight of stairs, but on the way was seized with violent pain in the abdomen and faintness. After this there was a constant flow of blood from the uterus associated with pain in the left hypogastric region.

The day on which I first saw the patient, she had taken a long street-car ride to visit her daughter in the Philadelphia Hospital; while walking across one of the court-yards she fell to the ground in a faint and was taken to a bed in the medical ward and from there was transferred to my department. An examination under ether revealed free fluid in Douglas's pouch and an induration in the left broad ligament. Laparotomy was done the following morning in the belief that the case was one of ruptured tubal pregnancy. On incising the peritoneum a large quantity of dark blood welled out; clots were found adherent to the intestines, and in the left broad ligament was a mass of old clotted blood which could be seen and felt through a rent in the posterior layer of the peritoneum covering the ligament. The tube was intact. As there were no traces of fresh hæmorrhage, the clots were picked from the intestines, the fluid blood washed out of the peritoneal cavity, and the abdominal wound closed without drainage. Her recovery was uninterrupted.

Here, no doubt, there had been a large pelvic hæmatoma from rupture of a bloodvessel during menstrual engorgement, followed by rupture of its peritoneal covering six weeks later. The condition found within the abdomen precluded the possibility of tubal pregnancy, and the woman denied, with perfect truth I am convinced, the possibility of impregnation.

CASE III.—L. B., aged thirty years, has had six children, the last two years ago. The day following this delivery she was obliged to arise to do heavy housework. Since this time she has suffered from severe recurrent pelvic pains, which have incapacitated her for work. A week before entrance into the Philadelphia Hospital she had aborted in the early months of pregnancy. On examination, a rather large and exceedingly sensitive tumor, which felt cystic, was discovered in Douglas's pouch. The uterus was anteverted and fixed. The examination, although carefully conducted, lighted up a sharp attack of pelvic peritonitis, which, however, quickly subsided under treatment. A subsequent examination confirmed the result of the first. With the idea that a bad pyosalpinx would be discovered, laparotomy was advised and agreed to.

A tumor was found in the right broad ligament and behind the uterus, to which it was loosely adherent by inflammatory exudate. It was seen to be independent of the tube, which, though slightly enlarged, presented a fairly normal appearance. On bringing the mass in sight, it was startlingly like a loop of intestine; placing intestine and tumor side by side, there was absolutely nothing to distinguish them in appearance. The ligature had already been placed below the tumor, but not tied; an incision was made in it to discover its nature and a great gush of blood told the tale. The thread was quickly and firmly tied, and the mass removed. It was found to consist of many bloodvessels, into some of which I could place the tip of my little finger. The woman made a good recovery, and when I last saw her, some months after the operation, she had been relieved of her former symptoms. There was still some exudate on the right side, but the uterus was in good position, and fairly movable.

The existence of varicose veins in the pelvis as a distinct disease, with distressing symptoms and dangerous possibilities, has not, I think, secured the recognition which its importance deserves. The occurrence of three cases in the experience of a single individual within a year, would indicate that the condition is by no means uncommon. A few other observers have recorded like experiences, and in occasional reported cases, one is inclined to think that enlarged vessels in the broad ligament had been overlooked or mistaken for something else. For instance, in a laparotomy recently described, complicated by rupture of the iliac vein, the vessel more probably was in the broad ligament, but by its size and enormous distention exactly simulated one of the great venous trunks of the body.

## CLINICAL MEMORANDA.

### MEDICAL.

*A Case of Croupous Pneumonia with Pericarditis, Simulating Pneumothorax.*—Michael G., aged twenty-eight years; married; born in Hungary; was admitted to the Pennsylvania Hospital April 12, 1890. Patient had been



sent from Phoenixville, and had walked to the railroad station and sat up in the cars on his way to Philadelphia.

Upon admission his respirations were 56; pulse 100, intermittent, and small; temperature 103.5°.

No history of his illness could be obtained, as he knew only a few words of English. Heart was displaced far to the right side, the apex beat being felt beneath the xiphoid cartilage, and over the usual præcordial area a tympanic percussion note was elicited. A distinct murmur was heard over the heart, which appeared to be exo-cardial. The right chest showed good expansion, that of the left was very defective, and the patient complained of much pain in the left side.

On the left side there was absolute flatness as far as the third rib, below this point the percussion note was high-pitched, but at the same time markedly tympanic. Breathing was distant and distinctly amphoric in character below the left third rib and over an extended area of the lower two-thirds of the left chest anteriorly. Metallic tinkling was heard over the lower third, and the bell sound could be distinctly elicited. Patient was too weak to enable me to make a very thorough investigation, and I think no examination of the back of the chest was made. From the coincidence of several of the most marked signs of pneumothorax, from the apparently sudden onset, great pains, dyspnoea, and prostration, I was inclined to regard the case as one of pulmonary fistula and resulting pneumothorax, probably following an attack of pneumonia with pulmonary abscess.

He was ordered carbonate of ammonium and whiskey, and sulphate of strychnine one-fortieth of a grain every four hours.

*April 13.* Condition critical; some yellowing of the sclerae.

*14th.* Pulse irregular; great dyspnoea.

*15th.* Failed rapidly, and died at noon markedly jaundiced.

There had been little or no expectoration during the patient's stay in the hospital.

*Autopsy,* twelve hours after death. Pericardium very much thickened and adherent to sternum, diaphragm, and surrounding parts. Marked diaphragmatic pleurisy. Heart was drawn over to the right by the pericardial adhesions, and the apex was beneath the xiphoid. Flakes of lymph were thickly studded over the whole inner surface of the parietal layer of the pericardium and over the outer surface of the visceral layer and some adhesions between the visceral and parietal layers at the base of the heart. While the pericarditis seemed to be in part recent, the adhesions to the diaphragm were apparently old. Hepatization of nearly the whole left lung. Kidneys normal.

While a more careful examination in this case would undoubtedly have saved me from falling into the error of diagnosis that I made, the diagnosis was, I think, not without its difficulties, and the possibility of such a mistake must be my excuse for reporting the case in detail.

HENRY M. FISHER, M.D.,

Physician to the Episcopal Hospital, etc.

PHILADELPHIA.

#### TOXICOLOGICAL.

*Nitroglycerin Poisoning.*—The patient was a married woman twenty-nine years of age; in poor health, and

suffering greatly from cardiac asthma. When I first saw her she had been taking a mixture which had produced symptoms of mild belladonna poisoning. The action of the heart was then feeble and irregular, and I prescribed drop doses of a one per cent. solution of nitroglycerin; also a solution of morphine, not only to produce sleep but as an antidote to the belladonna. Early on the following morning she arose to take a dose of the morphine solution, but by mistake swallowed two drachms of nitroglycerin. She soon remarked that the medicine "affected her head like brandy."

I was sent for, and on arrival found her with cold extremities and pale face; pulse strong and regular—eighty beats to the minute. She was semi-conscious, and the asthmatic breathing of the previous evening was still present. She apparently suffered from gastric distress, and subsequently told me that she had a desire to vomit.

A hot mustard foot-bath was given, and an emetic of mustard in coffee was administered, which was quickly followed by vomiting. As her condition was no longer alarming I left, with directions that her chest should be enveloped in a flaxseed poultice and that she remain in bed. On my return, later in the day, the dyspnoea had markedly subsided, and she had nearly recovered from her distressing symptoms.

After recovery she told me that she imperfectly recollected the events following the dose of nitroglycerin, though she remembered that breathing was more difficult than usual and that she was nauseated.

LOUIS KOLIPINSKI, M.D.

WASHINGTON, D. C.

#### MEDICAL PROGRESS.

*Methacetin.*—DR. C. SEIDLER reports his results in the treatment of a number of different diseases with methacetin (*Berliner klinische Wochenschrift*, April 14, 1890). In 28 cases of typhoid fever, pneumonia, tuberculosis, and influenza, in adults, a satisfactory antipyretic effect followed the administration of the drug.

In moderately high temperature—100° to 102°—doses of from 4 to 5½ grains are sufficient to reduce the temperature to normal with safety, but in higher grades of fever the dose must be increased to 6 or 7 grains. With a few patients only did the temperature fail to fall more than two degrees. In a patient with severe phthisis with a regular evening temperature of 104°, 5 or 6 grains of the drug about 3 o'clock in the afternoon prevented the temperature from rising above 100½°; but otherwise the patient was apparently not benefited. In most fever cases the fall in temperature was accompanied by a more or less profuse sweat, directly proportionate to the weakness of the patient, which fact unfits the remedy for use in phthisis. Headache, tinnitus aurium, deafness, giddiness, or vomiting were not noticed in any case after the administration of methacetin.

In two cases of acute articular rheumatism the drug acted promptly. The pain diminished on the first day after three doses of 4½ grains each, and on the third day pain, fever, and swelling had disappeared not to return.

As an antineuralgic, methacetin is less useful. For this purpose the author at first employed doses of 1½ to 4 grains, but soon found that to produce any effect larger

doses—5 to 8 grains—were necessary. In two cases of trigeminal neuralgia he prescribed  $4\frac{1}{2}$  and 6 grains of methacetin, in the first case with no effect; in the second case three doses of 6 grains each checked the attack. No influence in preventing the return of the disease was observed. The drug was also of little value in the neuralgic pains of locomotor ataxia. In the prodromal headaches of scarlet fever and typhoid fever, and in the headaches of gastric catarrh and nephritis, the effects were good, though in the author's experience antipyrine and antifebrin act more promptly in such conditions.

In conclusion, according to Seidler, methacetin is an efficient antipyretic, free from harmful effects other than the free sweating produced. It is also probably an excellent remedy in the treatment of acute articular rheumatism. As a nervine, and especially as an anti-neuralgic, it is not very efficient, though possibly it may be used to intensify the effect of other remedies used for this purpose.

**Trichloroacetic Acid in Diseases of the Nose and Throat.**—

EHRMANN, of Heidelberg (*Therapeutische Monatshefte*, April, 1890), reports success with trichloroacetic acid as a cauterant in diseases of the nose and throat. The crystals were applied by means of a silver applicator. The treatment was employed in 140 cases, including hypertrophy of the turbinated bodies, circumscribed polypoid hypertrophy, hypertrophic tonsillitis, hypertrophied uvula, follicular pharyngitis, and hypertrophy of the lingual glands. In 87 of these cases the cauterization was made but once, in 30 cases twice, and in the remainder from three to five times.

The author believes that trichloroacetic is much preferable to chromic acid, in that the cauterant effect is more localized and forms a much thicker eschar.

As an astringent, Ehrmann has employed the acid in the following mixture:

R.—Iodine . . . . .	2 grains.
Potassium iodide . . . . .	3 "
Trichloroacetic acid . . . . .	$4\frac{1}{2}$ "
Glycerin . . . . .	$7\frac{1}{2}$ drachms.

But as yet he refrains from expressing an opinion upon the value of this application. The acid used was that manufactured by Merck.

**Gonorrhœa in a Brother and Sister aged Six and Eight Years.**—

DR. F. M. CRANDALL, of New York, reports the case of a boy six years of age who was brought to the Polyclinic on February 6th with a history of a urethral discharge dating from about Christmas. On examination, the prepuce was found to be swollen and inflamed, and there was a free flow of pus from the urethra. Microscopical examination of the pus revealed numbers of gonococci of typical appearance and grouping.

Under treatment by an alkaline diuretic and an injection, there was a marked decrease in the amount of pus, but a slight gleet discharge still continues. Recent microscopical examinations show but a very small number of gonococci.

On February 11th (five days after the first visit of the boy) his sister, aged eight years, was brought, with a history of a vaginal discharge discovered by the mother about January 28th. Examination showed a profuse

purulent discharge from the vagina, with considerable redness and swelling of the vulva. Examination of this pus also revealed gonococci in great abundance.

Vaginal injections of sublimate solution (1 to 5000) were followed by rapid improvement and complete recovery by March 1st.

The author believes that the boy probably acquired the disease from an uncle with whom he slept, and who is known to have had a urethral discharge. The girl then acquired it from her brother, for intercourse is acknowledged by both parties.

Subsequently, however, the boy, following the example of an illustrious ancestor, alleged that the woman had beguiled him and was the author of his woe; that his sister had been infected by a young man who had been in the family, and that his own disease had been acquired from her. It is at least quite certain that the gonococci in the two cases originated from the same source.

The boy, it may be added, is strong, active, and rather large for his age. He is precocious, exceedingly shrewd, and evidently intelligent upon matters which boys of his age should know nothing about. It is a matter of considerable interest in such cases to know how much is due to inherited tendency and how much to vile company and vicious teaching.—*New York Medical Journal*, April 26, 1890.

**Transposition of the Abdominal Viscera.**—

According to the *Lancet*, Mr. Treves, in recently performing an ovariectomy, discovered complete transposition of the abdominal viscera. The liver was upon the left side, the spleen upon the right; the cæcum was in the left iliac fossa, the sigmoid flexure in the right; the aorta ran along the right side of the vertebral column. The stomach was transposed, the pyloric extremity being directed toward the left. It is probable that this condition also existed in the chest, for the apex beat was felt to the right of the sternum.

**Antiseptic Management of Vaccination.**—To avoid the dangers of vaccination, DR. ALFRED LEACH adopts the following precautions (*British Medical Journal*, April 19, 1890):

1. The lymph is obtained on the day it is to be used.
2. The instruments, the patient's arm, and the unopened tube of lymph are washed in a disinfecting solution.
3. In four places small scratches, and valvular punctures are made with a Gräfe's cataract knife charged with the lymph.
4. When the scarifications have become perfectly dry they are dusted with bismuth and a pad of dry lint is applied.
5. After the second day the nurse is directed to wash the part daily with a gentle stream of cold water, no sponge being allowed to come in contact with the wounds.

As a result of this careful treatment the author has seen but one case of inflamed arm during the past six years.

**Excision of the Mastoid Cells.**—HESSLER, of Halle, thinks that in mastoid disease Wilde's incision, which

consists in simply incising the tissues down to the bone, is of use when periostitis alone is present, and that it is insufficient when the cells are involved (*Archiv für Ohrenheilkunde*, Nos. 2 and 3). In doubtful cases he advises raising the periosteum to examine the condition of the bone beneath. If, from the appearance of the bone, disease of the mastoid cells seems probable, he performs so-called excision of the cells. This consists in opening the spaces and removing the carious portions without opening the mastoid antrum. The operation is, of course, inefficient if an abscess of the antrum is present. The author tabulates 66 cases of mastoid operation—89 of opening the antrum, 4 of Wilde's incision, and 23 of excision of the cells. In all of the latter cases there was great improvement, none requiring subsequent opening of the antrum.—*Weekly Medical Review*, April 19, 1890.

**Tetanus Treated by Parenchymatous Injections of Carbolic Acid.**—BIDDER, of Berlin, reports the following case (*Deutsche medicinische Wochenschrift*, March 6, 1890): A child of three and a half years received a crush entirely removing portions of the phalanges of the third and fourth fingers. Fourteen days after the injury typical symptoms of tetanus developed. The wound was then washed with a 5 per cent. carbolic acid solution, and dressed with a weaker solution. Internally one tablespoonful of a 3½ per cent. solution of chloral was given several times daily. The symptoms then somewhat improved and the jaws could be separated to a distance of three-fourths of an inch, though convulsions recurred when the child attempted to drink. The wound being in an unhealthy condition, the author injected hypodermically, in various places around it, a syringeful of 2 per cent. solution of carbolic acid. On the following day vigorous granulations appeared, the quick pulse became slower, the profuse perspiration disappeared, and the rigidity of the neck slowly relaxed. Three weeks later the wound had cicatrized and the patient was practically well. It is to be noted that during the course of the disease about three drachms of chloral were administered, which doubtless, in a measure, contributed to the result.

**Hydrastis Canadensis.**—According to *L'Union Médicale*, DR. CABANÉS has published a treatise upon the therapeutics of hydrastis Canadensis, in which he concludes:

1. That preparations of hydrastis Canadensis are useful remedies in the treatment of uterine hæmorrhage, and in the treatment of certain diseases of the stomach.

2. The most efficient preparations are the fluid extract, which may be given in doses of 60 to 80 minims, and the tincture (20 per cent.), which may be given in doses of 20 minims.

3. The drug is a vaso-constrictor, which explains its effect in checking uterine hæmorrhage.

4. In cases of excessive menstruation it should be administered between the periods.

5. The alkaloids of the drug have not yet been sufficiently studied to make their use advisable.

**Prescriptions for Gout.**—According to the *Internationale klinische Rundschau*, ELOY uses the following in gout:

R.—Iodide of lithium . . . 3½ grains.  
Extract of gentian . . a sufficient quantity.—M.

Divide into 20 pills, of which three or four should be taken daily.

or

R.—Iodide of lithium . . . 1½ drachms.  
Syrup of orange . . . 6 ounces.—M.

Two or three tablespoonfuls to be administered daily.

In cases of gout with symptoms of nephritis HUCHARD prescribes the following:

R.—Extract of stigmata of maize . 1½ drachms.  
Benzoate of sodium } of each 45 grains.  
Carbonate of lithium }  
Oil of anise . . . 3 drops.—M.

Divide into sixty pills.

Two pills to be taken before meals three times daily for twenty days in each month.

**Painful Second Dentition.**—In the oral pain caused by the eruption of the permanent teeth, DR. LOUIS STARR (*Therapeutic Gazette*, April 15, 1890) recommends painting the gums with the following solution:

R.—Hydrochlorate of cocaine . 4 grains.  
Glycerin . . . 2 drachms.  
Water sufficient to make . 1 ounce.—M.

When the pain is caused by molar teeth free lancing with an oblique crucial incision is to be recommended. Dr. Starr considers the following mixture also of much use in softening the gums and lessening pain:

R.—Chloride of zinc . . . 1 grain.  
Wine of opium . . . 1 drachm.  
Glycerin . . . 2 drachms.  
Rose-water sufficient to make 1 ounce.

Apply to the gums with a brush or soft cloth three times daily.

**Formula for Creasote.**—The following formula for prescribing creasote is quoted in the *Columbus Medical Journal*:

R.—Creasote . . . 20 minims.  
Alcohol . . . 6 drachms.  
Syrup } of each  
Cinnamon water . . . 3 ounces.—M.

Dose.—One tablespoonful.

**Constipation in Women.**—DR. LUTAUD recommends the following in obstinate constipation occurring in women:

R.—Citrate of iron and ammonium 31 grains.  
Fl. extract of cascara sagrada 32 minims.  
Saccharin . . . 8 grains.  
Water . . . 2½ ounces.—M.

A half teaspoonful three times daily before meals.

**Depilatory Paste.**—The *Pittsburg Medical Review* quotes the following:

R.—Sulphate of barium . . . 2 parts.  
Pulverized starch } of each 1 part.—M.  
Oxide of zinc }

Before using, sufficient water is added to convert into a paste, which is then applied to the skin and washed off when it causes pain.



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OF MEDICAL SCIENCE.

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SATURDAY, MAY 17, 1890.

## THE TREATMENT OF HABITUAL CONSTIPATION.

AMONG minor ailments probably none is more annoying to the physician or more disheartening to the patient than habitual constipation. One after another a series of drugs will be prescribed, each affording a measure of relief at first, but soon becoming powerless. Similar results are often experienced with the various articles of diet reputed to have laxative properties, until finally the patient, disgusted with doctors, learns to depend upon proprietary preparations, or, still worse, upon enemata. There are other methods of treatment, however, which are of permanent benefit, but which, unfortunately, are too frequently neglected by the physician in his desire to give immediate relief.

NOTHNAGEL, in a recent lecture on this subject (*Wiener medizinische Presse*, Nos. 10, 11 and 12, 1890), considers massage of the abdomen, electricity, and abundant exercise, the three most important elements in treatment. Abdominal massage cannot be properly performed by the patient upon himself, the effort required causing contraction of the abdominal muscles, which prevents deep pressure and manipulation. An efficient substitute for a *masseur* is a metal ball, weighing from three to six pounds, and covered with cloth to prevent chilling the skin. Every morning the patient should roll this over the

course of the large intestine for five or ten minutes, beginning in the right iliac region. Nothnagel warns us not to expect much from massage for several weeks, or perhaps months, but thinks that in the end it is invariably of benefit. Electricity may be used either in the form of galvanism or faradism, but the faradic current is, perhaps, the most useful. It is entirely unnecessary to place one pole in the rectum, as advised by Leubuscher and others, a strong current over the colon being sufficient. The patient should take considerably more than his accustomed exercise, not only walking and riding, but systematically performing the various calisthenic movements in his room or in a gymnasium. Many cases of slight chronic constipation can be greatly relieved by drinking one or two glasses of cold water on rising in the morning.

Cases of long duration will react to all methods of treatment very slowly, and in the meantime measures must be adopted to prevent them from suffering from the Protean symptoms of fecal accumulation. For this purpose a resort to laxative mineral springs stands at the head, but as many patients are unable or unwilling to leave their homes for a sufficient length of time, drugs or enemata must be employed. Under such circumstances Nothnagel believes that it is better to avoid drugs, if possible, and to use enemata alone. Enemata, for this indication, may consist of pure water or may contain olive oil, common salt, or castor oil, but glycerin is, as a rule, the most satisfactory enema, from one-half to one drachm being thrown into the rectum, or glycerin suppositories may be used.

The diet should be nutritious and easily digested, and acid fruits should be freely taken.

If, in spite of the patient employment of these measures, an occasional laxative becomes necessary, we have a long list of drugs from which to choose, any one of which may be particularly suited to the case in hand, though it is wiser to avoid calomel, castor oil, and all drastic purgatives, and to employ small doses of the vegetable laxatives, among which Nothnagel holds small doses of tamarind, aloes, and podophyllin in high esteem. A pill which he frequently uses is composed of podophyllin  $\frac{1}{4}$  grains, extract of aloes and extract of rhubarb, of each 45 grains, divided into forty pills, with extract of taraxacum as an excipient. One or two of these may be taken at bedtime. Cascara sagrada, which is undoubtedly the favorite remedy in this country for such conditions, is merely referred to by Noth-

nagel, and seems to have been used but little by him.

Another method, which probably originated in France, and which, though but little known, we have seen act most efficiently, is the daily administration of a tablespoonful of unground flaxseed, which has macerated for a few hours in water. The dose is not disagreeable to most patients, and in some cases it seems to be more than palliative.

Much of this advice may seem trite and time-worn to some, but observation has convinced us that many physicians are unjust to their patients and to themselves in the treatment of constipation; prescribing a laxative pill, giving a few suggestions about diet, and dismissing the case from their minds. To such we would repeat, that the foundation of treatment should be massage of the abdomen, electricity, and exercise, and that every laxative dose prescribed probably prolongs the time required to effect a cure.

#### THE DIAGNOSIS AND TREATMENT OF SALPINGITIS.

IN obtaining a clear idea of this subject a consideration of the pathology of the affection is necessary. The observations of MARTIN upon 287 cases of salpingitis, and a recent excellent paper by LABADIE-LAGRAVE, in a supplement to *La Médecine Moderne*, April 5, 1890, throw light upon this interesting and disputed point. We may briefly divide salpingitis into catarrhal or vegetating; suppurating salpingitis, whether from septic, puerperal, gonorrhœal, or tuberculous infection; tubal dropsy; and hæmatoma of the tube occurring without inflammation, often the earliest stages of tubal gestation. The anatomical structure of the fimbriated extremity of the tube is such as to favor the retention of secretions and predispose to inflammations. In a very large percentage of cases these affections are the result of endometritis, which often follows puerperal sepsis. It is easy to understand how a specific, tubercular, septic, or cancerous infection in the endometrium should result in salpingitis; but an explanation is not so apparent in the case of virgins, in whom none of these causes has been present; when we consider that the infectious diseases of childhood not infrequently result in inflammation of the vulva and vagina, a rational explanation is found for such cases. Bacteriology confirms these points by demonstrating the presence of the various infectious microorganisms.

Regarding clinical history, the disorder frequently runs an insidious course. With the exception of cases of acute infection, resulting in pelvic peritonitis, the disease may persist as such. Functional troubles are its first evidences, with indefinite pains, soreness, tenderness upon palpation, great discomfort in almost every attitude when prolonged, irritation about the bladder and rectum, and disordered menstruation. The occurrence of salpingitic colic is a very significant feature; it is characterized by sudden lancinating pains, which the patient compares to the pains of labor, referred to the hypogastrium or the location of the tube, ceasing suddenly, followed by the expulsion of several tablespoonfuls of serous or bloody fluid, expelled by the spasmodic contraction of the muscular tissue of the tube. If a tumor has been previously found, upon examination after one of the paroxysms, it has disappeared. A dislocation of the uterus ordinarily becomes reduced after the tube is emptied. A continuance of adhesive inflammation obliterates the fimbriated extremity of the tube, causing sterility. Vaginal examination discloses the tube enlarged, feeling like an irregular nodulated cord, in size and elasticity like the femoral artery, and exquisitely painful upon touch. The best method of examination is that with the patient upon the back, the thighs well flexed upon the abdominal wall, and a mild degree of anæsthesia is frequently necessary.

The subacute varieties of salpingitis develop a tumor, which renders diagnosis more easy. To differentiate this form from conditions resembling it, retroflexion, prolapse of the ovaries, ovarian cyst, phlegmon of the broad ligament, uterine lymphangitis, and tubal gestation, must be considered, though the latter can seldom be recognized with positiveness as more than a tubal hæmatocele.

The prevention and treatment of endometritis are of the greatest importance in the prophylaxis of salpingitis. Such should consist of absolute rest in bed, and disinfection of the genital tract by antiseptics. If this does not promptly reduce an elevated temperature the uterus should be curetted, thoroughly washed out, and disinfected with iodoform. When salpingitis exists it should be treated first by securing free and thorough drainage by dilating the uterus, removing vegetations of the endometrium, which frequently occlude the uterine openings of the tube, and disinfecting the uterine cavity. A tupelo tent furnishes an excellent dilator in these cases, and the curetting should be followed by the application of iodine and carbolic acid, or of car-

bolic acid and glycerin, or creasote and glycerin, to the interior of the uterus. Drainage may be kept up by the insertion of a strip of gauze saturated with iodoform or salol in glycerin, which should be carried to the fundus, and allowed to remain there; the gauze may be renewed every two or three days, and its application continued for several weeks. Uterine suppositories, containing salol or iodoform, may also be used to advantage.

The general treatment of the patient consists in absolute rest, in counter-irritation over the hypogastrium by the thermo-cautery, the application of which leaves a surface healing more rapidly, and less apt to suppurate than that produced by blisters; massage; the administration of tonics addressed to the patient's nutrition; the application of the faradic current, and careful attention to assimilation and excretion.

Laparotomy should be performed only in urgent cases, when the presence of large tubal or pelvic abscesses threatening septic infection is diagnosed. In chronic pelvic peritonitis which resists other treatment, laparotomy, with extirpation of diseased tissue is justifiable. It must be emphasized that these cases belong properly to the field of gynecology, and not to the domain of surgery.

#### STREET NOISES.

EVERY practising physician is but too well aware of the hindrances to recovery which often arise from the street noises of a great city. Many of these are inevitable, and recur with such frequency that even the nervous grow accustomed to them. It is the unexpected and, for the most part, preventible noises, like street music, which break in, often with most perilous effect, on the rest of nervous patients, on the first slumber which follows the crisis in some acute disease, or on the sleep either of convalescence, or, more serious still, of the stage which precedes surrender to disease or a successful struggle with its first approaches.

European cities have long since provided protection against street music by giving a householder the right to procure the arrest of any musician who persists in playing when he has been asked to desist. In Philadelphia, and in most American cities, a right of action against a penniless organ-grinder for maintaining a nuisance is the only protection afforded at present by law. Unless an organ-grinder can be bribed to move on, or a street band persuaded by a fee to go elsewhere, both have a full right

to remain when every moment of their stay under the window of a sick-room may mean torture, and, perhaps, most serious consequences to the patient.

Mr. Theodore M. Etting has introduced in Councils of Philadelphia an ordinance drawn on the law long in operation in London, which, under suitable restrictions, gives a householder the legal power to protect the sick-room from street music. It deserves the approval of every physician who understands the great difficulty, under the most favorable circumstances, of securing quiet and rest for his patients in a great city, and it supplies an important hygienic lack in the ordinances of this city as they stand.

#### THE MEETINGS IN WASHINGTON.

IN the following columns we present to our readers correspondence relating to the important meetings held in Washington during the last ten days, embracing that for the Pharmacopœia revision, the Association of American Physicians, and American Surgical Association. Many of the most prominent papers read have been obtained for the columns of THE MEDICAL NEWS, and will appear as rapidly as space permits. In the issue of next week the full report of the proceedings of these learned bodies will be presented to our readers, it being our endeavor to carry out, as far as possible, the object of THE MEDICAL NEWS to be a medical newspaper.

### CORRESPONDENCE.

#### WASHINGTON.

*Seventh Decennial Convention for the Revision of the United States Pharmacopœia.*

*To the Editor of THE MEDICAL NEWS,*

SIR: The Seventh Decennial Convention for the Revision of the United States Pharmacopœia convened here at twelve o'clock on Wednesday, May 7th, with the President, Robert Amory, M.D., of Boston, in the Chair.

Immediately upon coming to order the President announced the names of those who would form the Committee on Credentials, and this committee was instructed to report at the opening of the afternoon session. Having finished this business the Convention adjourned, and after forming in line, proceeded to the White House, where they were received by President Harrison.

At the opening of the afternoon meeting the delegates from the various medical and pharmaceutical colleges, and from the medical and pharmaceutical associations, were instructed to nominate one member from each delegation, in order that a Nominating Committee for the officers during the coming ten years and for the remainder of the session might be chosen. The rest of the business of this session was of no importance. The Convention adjourned at a little after four o'clock.

In the evening the Nominating Committee, consisting



of nearly one hundred members, met in the committee-room of the Arlington Hotel at 8 o'clock and proceeded at once to the nomination of the proper officers—Dr. Wood, of South Carolina, being chosen Chairman. After a small amount of preliminary business the committee unanimously elected Dr. H. C. Wood, of the University of Pennsylvania, as President of the Convention, and then nominated five Vice-Presidents, rather than two, as has heretofore been the custom. The following gentlemen were nominated: First Vice-President, W. S. Thompson, Washington, D.C.; Second Vice-President, Dr. D. W. Prentiss, Washington, D.C.; Third Vice-President, Dr. J. M. Flint, U. S. N.; Fourth Vice-President, A. E. Ebert, Chicago; Fifth Vice-President, Wm. M. Searby, San Francisco. The result of the ballot for the nomination of Secretary resulted in the election of Dr. H. A. Hare, of Philadelphia, as Secretary, and Mr. G. H. Charles, of St. Louis, as Assistant Secretary. From 10 o'clock until half-past 2 in the morning the time of the Committee was consumed in the nomination of the Committee of Revision, which eventually was made up in the following manner: Dr. Charles Rice, Chairman, New York; Joseph P. Remington, First Vice-Chairman, Philadelphia; Dr. Robert T. Edes, Second Vice-Chairman, Washington; Dr. C. O. Curtman, Third Vice-Chairman, Missouri; Dr. J. M. Flint, U. S. N., Treasurer; Dr. Roberts Bartholow, Philadelphia; P. W. Bedford, New York; Dr. F. A. Castle, New York; Dr. N. S. Davis, Jr., Illinois; C. Lewis Diehl, Kentucky; Dr. R. G. Eccles, New York; Dr. John Godfrey, U. S. M. H. Service; Dr. W. G. Gregory, New York; C. S. N. Hallberg, Illinois; John M. Maisch, Philadelphia; G. F. H. Markoe, Massachusetts; Dr. W. M. Mew, U. S. A.; Dr. Charles Mohr, Alabama; Oscar Oldberg, Illinois; Frank B. Pawer, Wisconsin; Dr. H. H. Rusby, New York; L. E. Sayre, Kansas; A. B. Taylor, Philadelphia; Dr. O. A. Wall, Missouri; Dr. H. C. Wood, Philadelphia; Dr. T. E. Wood, North Carolina.

Immediately upon the opening of the morning session on Thursday the Committee on Nomination made its report and the nominees were elected by the Convention by acclamation, the President and Secretary at once taking their places upon the platform. During the remaining portion of Thursday the time was occupied in the discussion of the thirteen recommendations made by the Committee appointed in 1880, with the result that they were all adopted with almost no changes or amendments, with the exception of three of them which dealt largely with the standardization of drugs and which were referred, after a considerable amount of discussion, to the Revision Committee, which had just been appointed; it being agreed that the entire question of standardization should be left to the judgment of this representative body. One section which dealt with the question of the use of "parts by weight" and the metric system, was laid upon the table and made the special order of business for Friday morning at 10 o'clock, and Professor Mendenhall, of the Coast Geodetic Survey, was requested to address the Convention in regard to the advisability of adopting the metric system in pharmacy. After appointing a committee of seven members to consider the manner in which delegates should be elected to the Convention of 1900 the Convention adjourned.

On Friday morning Professor Mendenhall delivered a

very interesting address, partly historical in its character, dealing largely with the importance of the introduction of the metric system and its recognition as the standard of weights and measures by all learned bodies. The interesting statement was made that while certain States of the Union had passed exceedingly stringent laws for the punishment of adulteration, and for the purpose of preventing short weights and measures, they had not yet passed any law stating what the standard weights and measures are, which is rather an anomalous condition of affairs. After a discussion the Convention unanimously agreed to recommend the adoption of the metric system, and referred the question as to the use of parts by weight to the Committee of Revision. At the same time the meeting let it be distinctly understood that the preference of the Convention was for the older method, and favored the abolition of the method in vogue during the past ten years.

In view of the enormous amount of work which had been accomplished by the Committee of Revision of 1880, it was the universal desire of all the delegates that the members of that Committee should at least receive some small amount of money, which would be more in the way of an honorarium than a recompense. Unfortunately the amount of money in the treasury did not permit this; but it was moved, seconded, and unanimously carried by the Convention, that the incoming treasurer should be instructed to pay to the Chairman of the Committee of 1880 the sum of \$1000, as an evidence of the recognition of his services. Dr. Rice generously refused to accept the gift, but his refusal was immediately voted down, and the Convention insisted upon his acceptance of the amount, which Dr. Rice immediately announced he would return to the treasurer as soon as it was received.

Two facts of great importance were also decided before adjournment. One was that the Committee should be instructed to publish and copyright the *Pharmacopœia* themselves, and to sell it at a nominal figure, only a sufficient profit being made to enable the Committee to carry out such scientific investigations as were thought desirable. Several times during the meeting a movement was started looking to the prevention of quotations from the United States *Pharmacopœia* by commentaries. This movement consisted in one instance in an absolute refusal to permit of such quotation, and in another of taxing the National and United States Dispensatories the sum of \$5000 each for the privilege of quoting from the standard book. Both of these movements were defeated, and at no time were popular in their character, the Convention readily recognizing the fact that the *Pharmacopœia* is published not for the purpose of making money, but of affording a standard to which the medical and pharmaceutical professions may refer when they so desire. It is interesting to note that the number of copies of the revision of 1880 which have been sold during the past ten years amounts to over 17,000, the proceeds from which went toward the enriching of a publishing house rather than the furtherance of scientific research. In view of these facts it is evident that the instructions given to the Revision Committee in regard to publication by the Convention, which has just adjourned, are very much wiser than those of the Convention of 1880.

## WASHINGTON.

(From our Special Correspondent.)

## Association of American Physicians and the American Surgical Association.

RAPIDLY following upon the adjournment of the convention for the revision of the Pharmacopœia which was held here last week, the Association of American Physicians and the American Surgical Association convened on Tuesday morning May 13th to discuss the papers prepared for their annual gatherings. On the first day the meetings of both associations were rather poorly attended, but upon Wednesday a very full attendance was present, and all through the entire meeting of both bodies the papers read may be considered as above the average, and the discussions resulting therefrom unusually to the point and valuable in their conclusions.

Both societies met in the Army Medical Museum, the physicians meeting in the library room, where sufficient space was provided and surrounded by large flags stretched upon screens, thereby excluding those who were not desirous of participating in the meeting, but who, nevertheless, wished to have access to the bookshelves. The surgeons, on the other hand, occupied a smaller hall on the floor above, which was large enough to suit their wants and sufficiently small to permit of each speaker being clearly heard, an advantage of which the physicians were deprived, unless the speakers made an effort to speak loudly and distinctly.

The session of the Association of Physicians began by the reading of the presidential address of Dr. Busey, of Washington, which dealt largely with the proposed changes in and amendments to the Constitution. Immediately after this, the various changes were taken up *seriatim*, and adopted or defeated as the Association thought best.

After the close of this business, Dr. Reeves, of Chattanooga, Tenn., read a paper of great interest on "Typhoid Fever,"<sup>1</sup> in which he dealt with the course of the disease in all its phases. The second paper of the morning was that of Dr. Norman Bridge, of Chicago, on "Appendicitis," while the third was the "Report of a Case of Varicose Aneurism of the Aorta and Superior Vena Cava." Dr. Lusk, of New York, contributed a paper on "Antisepsis During Labor," which was exceedingly interesting, and which your correspondent was able to obtain for the columns of THE MEDICAL NEWS, as well as the paper of Dr. Bridge already mentioned. The paper of Dr. Danforth, of Chicago, upon the "Diathetic Causes of Renal Inadequacy" was read by title, the author being unable to be present. The last paper which engaged the attention of this Association, on Tuesday, was one by Dr. Israel Dana, of Portland, Maine, upon "Seizures Characterized by Shock and Coma."

The meeting of the American Surgical Association was opened by the presidential address delivered by Dr. D. W. Randall, of Louisville, upon the "Pioneers of Surgery in Kentucky." This was followed by a paper on the "Surgical Treatment of Tumors of the Bladder," by Dr. P. S. Conner, of Cincinnati, a full abstract of which was obtained from the author specially for THE MEDICAL NEWS.

Dr. Stephen Smith, of New York, then read a paper

upon the "Treatment of Fractures of the Shaft of the Femur," and Dr. C. B. Nancrede, of Ann Arbor, closed the afternoon session by an exhibition of photographs and a presentation of the history of a rare form of epithelioma of the upper extremity.

The Wednesday morning session of the Association of Physicians began with an exceedingly interesting and learned paper upon "Disorders of Sleep," by Dr. S. Weir Mitchell, in which his large experience enabled him to make many interesting statements. This was followed by another, read by Dr. Charles F. Folsom, of Boston, upon the same subject—Dr. Folsom being placed on the programme with Dr. Mitchell as co-referee. After some discussion Dr. Charles L. Dana, of New York, read a paper upon a "Study of Sensory Disturbances in Hysteria," and was followed by Dr. Wharton Sinkler, of Philadelphia, with a paper upon "Recent Observations of the Etiology and Treatment of Megrin." Dr. Ward's paper upon "Angio-neurotic Edema" was not read owing to the absence of its author.

Immediately after luncheon Dr. Harold Ernst, of Boston, made a demonstration of the result of the inoculation of rabbits with five or six drops of milk obtained from a cow afflicted with tuberculosis of the udder. Three out of four of the animals died within eight weeks of the inoculation, and the post-mortem showed the presence of miliary tuberculosis in all the abdominal organs. Dr. Ernst also made a report upon vaccination and the studies of Dr. Martin upon the isolation of the *contagium vivum* of cow-pox, a fuller account of which will be found in the proceedings of the Association, which will be published next week.

The remaining portion of the day was consumed by demonstrations on the part of Dr. Prentiss, of Washington; Dr. Fitz, of Boston; and Dr. Welch, of Baltimore. Dr. Prentiss showed a case of rheumatic purpura, and another of exceedingly slow pulse, while Dr. Fitz and Dr. Welch showed, respectively, microscopical preparations of a case of acute pancreatitis, and another of acute diphtheritic colitis with peri-pancreatic fat necrosis.

On Thursday Dr. Kinnicutt, of New York, and Dr. Shattuck read a paper on "Methods of Diagnosis in Diseases of the Stomach," and Dr. Shakespeare, of Philadelphia, one upon the "Prevention of Tuberculosis." After this Dr. Graham reported two cases of acromegaly. His paper was obtained for publication in THE MEDICAL NEWS.

The Wednesday morning session of the American Surgical Association opened with an address by Dr. Thomas G. Morton, of Philadelphia, upon "Surgical Operations for the Correction of Club-foot, with special reference to Tarsectomy or Excision of Bones." Interesting photographs of the result of surgical procedure were exhibited.

Dr. W. T. Bull, of New York, then read a paper "On the Radical Cure of Hernia," reporting results of over 100 operations.

Dr. Mastin, of Mobile, presented photographs of a case of lumbar hernia, giving an exhaustive *résumé* of the literature upon the subject in an essay entitled "Anomalies of Hernia."

The afternoon session was opened by a paper upon "The Propriety of the Removal of the Appendix Vermiformis During an Interval of Recurring Attacks of Appendicitis," by Dr. Frederick S. Dennis, of New York.

<sup>1</sup> This paper will shortly appear in THE MEDICAL NEWS.

Dr. Theodore F. Prewitt, of St. Louis, was not present to read his article upon "A Successful Case of Splenectomy Complicated with Cyst of Pancreas."

Dr. Joseph Ransohoff, of Cincinnati, reported "A Case of Dural Hæmorrhage, with symptoms appearing one week after traumatism; Trephining; Secondary Hæmorrhage; Ligation of Common Carotid; Pyæmia; Secondary Bleeding from Carotid; Death."

The Nominating Committee then presented their report, which was unanimously adopted, the following officers being elected for the ensuing year:

*President*—Dr. C. H. Mastin, Mobile, Ala.

*First Vice-President*—Dr. John Collins Warren, Boston.

*Second Vice-President*—Dr. Stephen Smith, New York.

*Secretary*—Dr. John R. Weist, Richmond, Ind.

*Treasurer*—Dr. Phineas S. Conner, Cincinnati.

*Recorder*—Dr. J. Ewing Mears, Philadelphia.

*Council*—Dr. Stephen H. Weeks, Portland.

*Committee of Arrangements*—Dr. John S. Billings, U. S. Army.

### "A WOLF IN SHEEP'S CLOTHING."

To the Editor of THE MEDICAL NEWS,

SIR: The following circular came to me in my mail a day or two ago. It seems to me to be a positive insult to the medical profession for these people thus to undertake not only to set them aside, but to solicit their aid in so doing, and you may, perhaps, think it worth while to notice the matter again, for, on a previous occasion, it was dealt with in one of your editorials.

Very respectfully yours,

JOHN H. PACKARD, M.D.

May 3, 1890.

PHILADELPHIA, April 30, 1890.

DR. J. H. PACKARD: We presume you are frequently called upon to require your patients to have an ophthalmic examination.

Fully appreciating the responsibility you are under in referring such patients, both because of the professional skill required, as well as the expense and loss of time to which you are obliged to put your patient, we have endeavored to meet such needs in a thoroughly practical and business-like manner.

We have permanently engaged the services of a number of registered physicians who in addition are ophthalmologists. That we have engaged them for this work is, we hope, a sufficient guarantee to you of their fitness for such a position. We find that all but ten per cent. of persons requiring glasses may be satisfactorily fitted *without* either the use of mydriatics or an examination with the ophthalmoscope. For such cases we charge only for the glasses furnished. When, however, the result of the preliminary examination shows that a more accurate and lengthy analysis must be made, one of our oculists is given charge of the case and the proper formula for the glasses prepared. Of course, any affection which requires other remedy than that of glasses, will be properly cared for. Our charge for such services is ten dollars. You will, we think, at once see that the wants of your patients will be well served if you refer them to us, because: 1st. They will, in most instances, obtain their glasses in *one visit*. 2d. They are not obliged to visit a physician's office in one part of the city, and an

optician in another—examination, formula and glasses being all obtained at our office. 3d. As everything in connection with the measurement for the furnishing of glasses is done under our direction, we are able to hold ourselves responsible for a result satisfactory to the patient and yourself, and are ready, in case the glasses are not entirely satisfactory, to take them back and refund the money paid for both examination and glasses. 4th. The cost of the entire transaction is most reasonable, without even considering the saving in time. We, therefore, hope that we may have your esteemed patronage for such work.

Yours truly,

QUEEN & CO.

### NEWS ITEMS.

**Tulane University, New Orleans.**—It has been announced that Dr. Sterling D. Kennedy has resigned the position of Lecturer on Diseases of the Eye and Ear in the Tulane University, and that Dr. W. C. Ayres has been elected to fill the position. Dr. J. D. Bloom, assistant house surgeon of the Charity Hospital, has been elected Lecturer on Diseases of Children, and Dr. John H. Bemiss Lecturer on Clinical Medicine.

#### OFFICIAL LIST OF CHANGES IN THE STATIONS AND DUTIES OF OFFICERS SERVING IN THE MEDICAL DEPARTMENT, U. S. ARMY, FROM MAY 6 TO MAY 12, 1890.

By direction of the Secretary of War, HENRY JOHNSON, *Captain and Medical Storekeeper*, now on duty at the Medical Purveying Depot, New York City, will take charge of that Depot, and perform the duties of Edward P. Vollum, Colonel, Surgeon, and Acting Assistant Medical Purveyor, during the absence of the latter.—Par. 11, S. O. 109, A. G. O., Washington, D. C., May 9, 1890.

By direction of the Secretary of War, leave of absence for two months, to take effect June 1, 1890, with permission to go beyond the sea, is granted EDWARD P. VOLLUM, Colonel, Surgeon, and Acting Assistant Medical Purveyor.—Par. 10, S. O. 109, A. G. O., Washington, D. C., May 9, 1890.

By direction of the Secretary of War, the following named officers are detailed as Delegates to represent the Medical Department of the Army at the annual meeting of the American Medical Association, to be held at Nashville, Tennessee, May 20, 1890: JEDIDIAH H. BAXTER, *Colonel and Chief Medical Purveyor*; ALFRED A. WOODHULL, *Major and Surgeon*. The officers named will proceed to Nashville at such time as will enable them to reach there on or before May 20th.—Par. 4, S. O. 107, A. G. O., Washington, D. C., May 7, 1890.

#### OFFICIAL LIST OF CHANGES IN THE STATIONS AND DUTIES OF THE MEDICAL CORPS OF THE U. S. NAVY, FOR THE WEEK ENDING MAY 10, 1890.

GREEN, E. H., *Passed Assistant Surgeon*.—Ordered to the Receiving-ship "Dale," Washington Navy Yard.

WHITING, ROBERT, *Passed Assistant Surgeon*.—Detached from the "Dale," and ordered to the Nautical School-ship "St. Mary's."

WHITAKER, H. W., *Passed Assistant Surgeon*.—Detached from the "St. Mary's," and resigned, to take effect November 5, 1890.

ROSS, J. W., *Surgeon*.—Ordered to the Navy Yard, Pensacola, Florida.

FLINT, J. M., *Surgeon*.—Appointed a Delegate to represent the Medical Department of the Navy at the Pharmacopœia Convention to be held in Washington, May 7th.

DEAN, R. C., *Medical Inspector*.—Appointed a Delegate to the American Medical Association Convention, to be held at Nashville, Tennessee, May 20, 1890.

WOOLVERTON, T., *Medical Inspector*.—Appointed a Delegate to the American Medical Association Convention, to be held at Nashville, Tennessee, May 20, 1890.